PHILADELPHIA, MAY 14, 1887.

ORIGINAL LECTURES.

ON THE TREATMENT OF SCARLET FEVER.

BY FRANK E. WAXHAM, M.D.,

Professor of Diseases of Children in the College of Physicians and Surgeons, Chicago, Illinois.

Reported by WILLIAM WHITFORD.

GENTLEMEN,—We will consider to-day the therapeutics of scarlet fever, and, as indicated in our last lecture, the treatment of the disease will be preventive, hygienic, and medicinal.

Preventive Treatment.—In the prevention of the contagious diseases there is a wide field for investigation. We have no specific preventive of scarlet fever as we have of smallpox. The virus of the disease has been inoculated into animals, but its severity has not been modified, the subjects almost invariably dying within a few days from the violence of the malady. It is barely possible that future investigations will prove that the virus, by repeated cultivations, may be so modified that it may be safely inoculated into the human subject, but as yet our preventive measures are limited to isolation, ventilation, disinfection, and the application of antiseptics to the body of the patient.

Perhaps I should refer, in this connection, to certain remedies that have been brought forward from time to time as useful in the prevention of this disease. Belladonna is perhaps the most favorably known in this respect. It has been approved frequently by authorities, and recommended as a remedy which when given previous to an attack of the disease will prevent its occurrence. Boric acid has been more recently advocated for the same purpose, but it is extremely doubtful whether we have any remedy which, administered internally, will prevent an attack of scarlet fever.

Isolation perhaps is our most important preventive measure. Too frequently, indeed, we see cases treated in luxurious apartments, where there are richly upholstered furniture, Brussels carpet, and heavy lace curtains, all of which retain the poison of the disease for weeks or even months. Too often the physician enters the house of a patient sick with scarlet fever, and, removing his overcoat and leaving it upon the rack, goes to the sick-room, and perhaps examines his patient carefully for half an hour, collecting all the poison possible upon his person. Then, after leaving the apartment, he puts his overcoat on again, thus carrying with him the germs of the disease to be distributed to the next family that he visits. This is all wrong. The conscientious physician will take every precaution possible towards the prevention of this dreaded disease of childhood. The moment we are suspicious of an attack of scarlet fever and are called to see a patient, and find the rapid pulse characteristic of the disease, together with occasional vomiting and sore throat,—when we observe these symptoms we should at once isolate the patient, and then if we have made a mistake no harm certainly will have resulted, but if the case proves to be one of scarlet fever other lives may be saved by this precaution. There are two methods of isolation,—viz., (1) we may place the patient in a spare room alone, with an attendant or nurse; (2) we may send the well children away from home, to the friends, neighbors, or relatives of the family. But here we often meet with the remark that they have no friends, no neighbors or relatives to whom they can send their well children. In Chicago I know there is no place where well children can be sent: there is no public institution or hospital where well children, under such circumstances, can be taken and cared for until the danger has passed and until they can return safely to their homes. In every large city there should be a hospital or refuge where such children can be carefully watched and cared for until they can be safely taken home. If possible, we should take the patient to a large room and there isolate it with a nurse; the meals should be taken to it; and the nurse, whenever she leaves the room, especially to mingle with the other members of the family, should thoroughly disinfect her hands and face and change her clothing. The child should remain in the apartment not only until the disease has subsided, but until desquamation has completely taken place. The discharges from the nostrils and mouth should be collected on old cloths and should be burnt; the discharges from the bowels

should be passed in some antiseptic fluid and destroyed. (For instance, we may use a solution of eight ounces of sulphate of zinc, one ounce of carbolic acid, and three gallons of water; or, in preference to this solution, we may make one of one pound of chloride of iron, an ounce of carbolic acid, and three gallons of water. This makes an excellent antiseptic solution.) The bedding, sheets, and clothing of the child worn during the sickness should not be removed from the room until they are thoroughly saturated with the first antiseptic solution mentioned: they may then be removed and boiled in water, which will effectually kill the poison. After complete desquamation has occurred and the skin has returned to its natural suppleness and softness, the child should be anointed with some carbolized ointment and fresh, clean clothes placed upon him, and then allowed to mingle with other members of the family. After the patient has left the room a pound or three pounds of sulphur should be saturated with alcohol and burned, and the fumes should remain several hours in the apartment, then the windows should be opened and the room thoroughly ventilated. If in addition to these measures the room be repapered or recalcimined, then there will be little danger of its being a medium of contagion. I should have remarked also that all superfluous furniture should be removed from the room, the curtains taken down, carpets taken up and removed, leaving nothing behind that cannot be thoroughly disinfected. The wood-work around the room should be scrubbed after the recovery of the patient. In case this is impossible, and the crowded condition of the people will not permit of complete isolation in the home, you can place the patient in a corner of the room on a bed, keep the well children away from him as well as you can, apply frequently antiseptic ointments or lotions to the body of the patient, and in this manner you will be able to destroy the poison and prevent its escape about the room. For this purpose we might use a combination of cold cream and glycerin, to which a little carbolic acid may be added, or cosmoline or fresh lard into which the carbolic acid is incorporated. This should be applied all over the body of the patient every two or three hours. I well remember being called to a family consisting of father, mother, and three children, and one of the children showed unmistakable evidences of an attack of scarlet fever. All the initial symptoms were present: rapid pulse, chill, slight vomiting, etc. I endeavored to impress upon the minds of the parents the importance and practicability of sending the well children away from home, but they informed me it was impossible to do so. They lived in three small apartments: one was used for a bedroom (in which there were two beds), the other two for sitting-room and kitchen. The bed which the well children occupied was taken from the bedroom and placed in the sitting-room; the door was open so as to warm the sick-room comfortably. The well children were prevented from entering the room of the patient, antiseptics were applied repeatedly for two or three weeks (and he, by the way, had a severe, sharp attack of the disease), and when the child left the room it was thoroughly disinfected, and the other children escaped the disease. I think it was due entirely to the local application of antiseptics as previously directed.

Hygienic Treatment.—The hygienic treatment of the disease requires keeping up a uniform temperature day after day, night after night, and week after week, until convalescence has occurred. This is of great importance. The temperature range of the apartment should be from 68° to 70°; but in the latter stages of the disease, after the fever has subsided, it may be higher, and we perhaps may have a temperature of 70° or 75° during convalescence, because complications are more liable to occur during this period. There is a greater liability to complications attending a low temperature. The diet should be simple, plain, and nourishing. The room should be well ventilated. It is a mistake to heap clothing upon the child, and thereby increase its discomfort; the clothing should be just comfortable. If the child is hot and feverish, simply throw a sheet or thin coverlet over it, and do not attempt to increase the body-temperature by a great amount of clothing. Frequently you will find ignorant people who, having a child coming down with measles or scarlet fever, will put hot poultices upon it, then over all these three or four heavy blankets, and the consequence is that the child will be nearly suffocated. The idea on the part of the parents is to keep the child warm, so that the rash will come out

well. This is dangerous: it will increase the bodily temperature and irritation; it will do no good whatever. The clothing, therefore, should be light and comfortable. So much for the hygienic treatment.

Medicinal Treatment.—In regard to the medicinal treatment let me say this: it is impossible to abort an attack of scarlet fever. If the child has been exposed and is susceptible to the disease and manifests unmistakably the initial symptoms, it must pass through the attack. It is impossible by heroic measures or otherwise to break it up, so that if the attack be mild we will be satisfied simply with rigid preventive and hygienic treatment, together with careful watching of the patient, without the administration of much medicine. Give the child plenty of water to drink; I have never known any harm to result from an abundance of water. Any child suffering with a contagious disease should have plenty of cold water. If the skin is hot it should be thoroughly anointed with lard or vaseline, cold cream or cosmoline, as previously mentioned. The application of these will serve a double purpose: they will prevent the diffusion of the contagion through the room, allay the burning and irritability of the skin, and are at the same time soothing to the inflamed epidermis. The frequent application of soothing lotions, the occasional cool sponge-bath, may be all that is required in mild cases. If, however, the attack is somewhat more severe; if the pulse is rapid, the temperature elevated to 103° or 104°, then perhaps we should resort to some medication, such as a combination of quinine. I believe that quinine is one of our most useful remedies in the treatment of diseases of early life. We might give the following:

℞ Quininæ sulph., ℈j;
Ext. glycyrrhizæ fld. (Burrough Bros.), f℥ss;
Ol. anisi, gtt. vj;
Syr. simp., ad f℥ij. M.

Sig.—Teaspoonful of this may be given every three hours. It is an antipyretic.

In addition, for a child two years old, we may give:

℞ Tr. digitalis, gtt. xxxij;
Liq. ammon. acetatis, f℥ss;
Syr. simp., f℥ss;
Aquæ, q. s. ad f℥ij. M.

Sig.—Teaspoonful to be given every three hours, alternating with the quinine.

If the case is not dangerous and severe, this will be sufficient. Let us suppose there is a throat-complication,—the inflammation of the throat severe and false membrane forming in the pharynx. Instead of the digitalis mixture we might use the following combination:

℞ Tr. ferri chl., gtt. xxxij;
Glycerini, f℥ss;
Potassii chloratis, gr. xx;
Syr. simp., q. s. ad f℥ij. M.

Sig. Teaspoonful to be given alternating with the quinine-mixture.

I believe no good can result in these cases from a continual swabbing of the throat with a rough sponge and the use of astringents. The physician can occasionally with benefit paint the pharynx with some astringent lotion; but a coarse swab in the hands of an attendant will only increase the irritation of the pharyngeal mucous membrane and aggravate the symptoms. In place of the swab, we will accomplish far better results with the hand-atomizer, which is less annoying to the child. We may make this combination:

℞ Acidi carbolici, gr. ij;
Potass. chloratis, gr. xx;
Glycerini, f℥ss;
Aquæ, ad f℥ij. M.

This may be used in the atomizer every hour or so. The throat and pharynx should be thoroughly sprayed by such a solution, and it will not only be soothing to the pharyngeal mucous membrane, but antiseptic as well. We might gain a point by the use of lime-water in the solution, instead of plain water, inasmuch as it is a solvent to false membranes. If there is invasion of the nasal passages and a mucopurulent discharge from the nostrils, we should resort to the use of the spray. Let us attack the mucous membrane of the nostrils the very moment it becomes invaded, or the very moment symptoms of coryza manifest themselves. Immediately make use of the atomizer or nasal douche,—a solution of the bichloride of mercury or carbolic acid, to act upon the naso-pharyngeal mucous membrane,—and in this manner we will in many cases prevent the inflammation from extending into the middle ear by way of the Eustachian tube. We will prevent in many of these cases the suppurative inflammation that so frequently results in perforation of the membrane of the drum of the ear, with obstinate and offensive discharges.

If the disease be accompanied with high

temperature, we must endeavor to reduce it by the frequent use of the cool sponge-bath, the cold bath, or the cold pack, or by the use of antipyrin or thallin. I believe these measures are far better than large doses of quinine, for the large doses necessary to reduce the temperature in a child will usually disturb the stomach and interfere with digestion; they will be frequently rejected, and consequently no benefit will be derived from them. We will resort then to frequent sponging of the patient's body with water in which some alcohol is placed. If this does not reduce the temperature, we may give ten or twelve grains of antipyrin per rectum, the injection to be repeated in an hour or so: in fact, we give two or three injections until the temperature is reduced. If the antipyrin fails, you can make use of thallin; but antipyrin is preferable to thallin, for the reason that it is not so depressing in its action. If these measures fail, we will resort to the cold bath. In giving the cold bath let us give it in such a manner as to produce no shock to the system. Let it be tepid, and reduce the temperature of the bath by adding pieces of ice; this will gradually lower its temperature without producing shock to the patient. Or in place of the cold bath we may use the cold pack. If we use the cold pack, the sheet which is wrapped around the child should be first wrung out of tepid water; after it is wrapped around the child it should be saturated by sprinkling cold water upon it, and then a blanket should be placed over the sheet so as to keep the child comfortable, and in this manner you may reduce the temperature gradually, and the patient may be able to remain in the pack ten, fifteen, twenty, or thirty minutes. After this time everything should be removed, the child thoroughly dried and placed in bed. In a great majority of cases the temperature will fall two or three degrees. Some authorities recommend that the patient be stripped and placed in a wash-tub, and then several pails of cold water thrown upon it at some little height; but I would not advise this process. If you were to take a little, frail, delicate child dangerously ill with scarlet fever, place him in a tub and dash cold water upon him, I should fear the result: the shock to the system would be too great.

In those cases attended with grave cerebral symptoms such as convulsions, followed by stupor and coma, we should make use of the bromides, or if the bromides fail to control the convulsions we might add chloral. In addition to this the head should always be kept cold, and for this purpose we may use the bladder or the rubber ice-bag, filling it half full with pounded ice and bran, which should be kept about the head. The rubber coil filled with ice-water, placed over the head, is also beneficial in these cases.

Complications.—A few words in regard to the treatment of the complications. If there is enlargement of the lymphatic glands of the neck, with tenderness, we should apply over them a pad saturated with cold water, or take a small rubber bag and fill it partly with pounded ice, and place it over the inflamed, swollen glands. The idea is to prevent suppuration if possible. If you detect fluctuation, it should be poulticed and opened early, and then dressed antiseptically.

In regard to the otitis of the middle ear which is so troublesome, and frequently so dangerous, at the very onset of the symptoms we should apply a leech either back of or in front of the ear. The hemorrhage should be encouraged, if the child is not too greatly prostrated, by the application of warm poultices, which will generally abort an attack of inflammation of the middle ear and greatly allay the pain. But if the pain be sharp and excruciating, we may use in addition an opiate mixture, dropping within the ear a few drops of warm water containing one-sixth of a grain of morphia, or a small quantity of glycerin containing a few drops of the tincture of opium. We should watch the symptoms of otitis very closely indeed. If the pain continues, especially if there are cerebral symptoms with a bulging of the membrane of the drum of the ear, then paracentesis should always be performed and the accumulated pus allowed to escape. After paracentesis has been performed, antiseptic lotions should be used in the ear. A solution of boric acid is one of the best; say a scruple of boric acid to an ounce of water. A half-teaspoonful of this may be used three or four times a day, or we may use the peroxide of hydrogen, which is a very useful remedy: it penetrates the opening that has been made in the drum of the ear and destroys the pus. It may be used three or four times a day. A great many authorities recommend powdered

boric acid to be placed in the ear-cavity two or three times a day; but you must remember that by the use of boric acid you may occlude the opening of the drum of the ear and prevent an escape of the pus, and then you will have a return of pain in the organ, and perhaps cerebral symptoms as well. If this occur, you must at once resort to the douche in the ear by means of a fountain syringe, using a pint or more of warm water. It will be sedative in its effect; it will remove the incrustation that has formed about the opening, as well as the obstruction.

The rheumatism that occasionally complicates scarlet fever is usually mild, not dangerous, and an anodyne or opiate administered at night, together with cotton padding placed about the joints, will generally be sufficient. If this does not suffice, we may use quinine or salicylic acid, or any of the other rheumatic remedies.

Nephritis I have already referred to as one of the most frequent and one of the most dangerous complications of the disease. I alluded to the necessity of keeping children in the house for three or four weeks in order to prevent the occurrence of this complication, and to the fact that this complication occurs during the period of desquamation, and it is generally the result of exposure to cold and dampness. Hence you can see how important it is that we should give strict and imperative directions with regard to keeping patients within until desquamation is entirely completed and the skin has returned to its suppleness and normal condition.

If dropsy has occurred and the child is very much weakened, then tonics are in order: iron—any of the ferruginous tonics—may be used. These are indicated together with cod-liver oil. If the dropsy is considerable, and there is urgency in regard to the case, you may use cathartics and diaphoretics. Endeavor to eliminate the urea by the skin and from the bowels. In these cases the urine is usually lessened in quantity and loaded with albumen. Let us avoid stimulating the kidneys, for they are already congested, and if we stimulate them to increased activity by powerful diuretics we will naturally do harm. Let us therefore act upon the skin and bowels rather than upon the kidneys. If the case, as I have stated before, is urgent, we may make use of a mild diuretic, such as digitalis containing a little syrup of squill and spirit of Mindererus. We may use the following:

℞ Tr. digitalis, gtt. xxxij;
Liq. ammon. acetatis, f℥ss;
Syr. scillæ, f℥ij;
Aquæ, q. s. ad f℥ij. M.

Sig. A teaspoonful three or four times a day to a child two years old. Digitalis is an excellent cardiac stimulant; it is a tonic as well as a mild diuretic. If the urine is scanty we must use more powerful remedies, such as the hydragogue cathartics. The mineral waters or a solution of the citrate of magnesia will be useful in such cases.

Let us act upon the skin by diaphoretics; and we may use in this connection the sweet spirit of nitre or spirit of Mindererus. Here is a point to which I desire to direct your attention: the sweet spirit of nitre is a powerful diaphoretic; it is a cardiac and cerebral stimulant; it stimulates the secretions of the stomach, salivary glands, and pancreas when administered internally. If you administer it and at the same time keep the surface of the body warm, it will act as a diaphoretic; but if the surface be kept cool, then it will act as a diuretic instead.

If the urine is nearly suppressed and there are premonitory symptoms of uræmic convulsions, you may use pilocarpine (the active principle of jaborandi). It may be given hypodermically or by the mouth. It is a powerful diaphoretic; it increases salivation, and is eliminated by the skin. It is a useful remedy to employ in urgent cases. We may also prompt the bowels by the use of podophyllin, and add to it the mild chloride of mercury. You may use croton oil, one-half or even one drop for a child three or four years of age. It will have a marvellous hydragogue effect in cases of uræmic convulsions.

To recapitulate: Let us not endeavor to break up an attack of scarlet fever, but rather be content with enforcing rigid preventive, hygienic treatment, using mild measures in mild cases; simply controlling the febrile action and temperature; supporting the patient; preventing complications, and curing them when they occur.

THE Annual Meeting of the American Surgical Association was opened with an address by the President, Professor Hunter McGuire, on the 11th instant, in the city of Washington. A report of the proceedings will appear in the next issue of the *Medical Times*.

ORIGINAL COMMUNICATIONS.

DIPHTHERIA.

Read before the Somerset County (Maine) Medical Association

BY A. E. FARNHAM, M.D.,

President of the Association.

LAST spring, during the month of April, diphtheria broke out in the village of East Madison, and for about three months the disease was endemic and raged with great fury. There had been no cases of the disease in the place for several years, and none was known to be about when the fatal malady made its appearance. It was limited to the village, and although people came to the place to trade, and in some instances to nurse the sick, no case occurred outside. The village and town had always been remarkably free from sickness, and there had been no prevailing disease prior to the outbreak. The sanitary condition was good, and the condition of things the same as usual when the disease made its appearance. At my request, Dr. A. G. Young, of the Maine State Board of Health, made a visit to the place, and after a careful investigation declared that the sanitary condition of the village was good and about the same as other small villages in Maine. Why we should have such a fatal form of the disease, and why it should rage as it did, neither Dr. Young nor any one else could tell. But rage it did, and spared neither old nor young. Death followed death till home after home was filled with mourning and the inhabitants were well-nigh panic-stricken. Physicians from far and near were called, but the disease swept on unchecked, and seemingly uninfluenced by treatment. It finally disappeared as suddenly as it came; but what waste of life it had wrought!

I had attended diphtheria in my practice, and seen much of it in city and country, and knew it was a fatal disease in many cases, but must say that, if I learned nothing else during this last terrible siege, I have learned to dread and fear diphtheria.

Just prior to the onset of the disease there were many cases of sore throat and tonsillitis, attended in some cases by considerable fever and prostration; and some of those thus affected afterwards thought that they had had the disease, "only a little lighter." But this was a mistake. When diphtheria is prevailing, these cases of sore throat are often called diphtheria. This sore throat is catarrhal, and is ushered in by a chill; the patient feels ill, and constitutional disturbances are experienced; but it is not to be recognized as a case of diphtheria unless you find an *exudation*, which is the great diagnostic feature. The sore throat may be ulcerative, but should not be mistaken for the membranous exudation of diphtheria. There is an occasional pseudo-membranous exudation in other diseases. For instance, croupous laryngitis resembles diphtheria as regards exudation, but not in the severe constitutional disturbances which are found in the latter, because croupous laryngitis is a local disease.

All diseases have a favorite place of attack: gout the big toe, typhoid fever the intestines, etc. Diphtheria attacks the mucous membrane, generally of the pharynx, but it may attack mucous membrane anywhere, as in the posterior nares or rectum, or it may attack an abrasion. A change takes place in the mucous membrane. There is congestion, but not active. The membrane is dark-colored, bluish rather than red. It may be purple; and it quickly becomes swollen. Changes take place first in the epithelium and subepithelium. This change is an infiltration of granular matter. The infiltration may go on beneath the epithelium, and involve the mucous and submucous tissue. The exudation is generally of a dirty yellow or leaden color, but may be stained by medicine or by matters vomited. This exudation is not a false membrane, but the different layers of epithelium or mucous tissue swollen and raised above the level.

What is this exudation? One author says it is granular fibrine, another holds that there is no cellular exudation. The exudation is of low power, and has no power of organization. The micrococci theory many of the best authors believe false. True, the parasites are found in the exudation soon after it has been removed, but are due to degeneration of tissue. They form in the exudation afterwards, as in other morbid conditions. Whatever the exudation is, it cannot be absorbed, but must be removed by a gangrenous or sloughing process. The exudation, when swept off or forcibly removed, returns. It should never be removed by force. Escharotics should not be used, for this rea-

son. If the infiltration be rapid and severe, so much tissue may break down and become gangrenous that death may result from septicæmia.

Early in the disease there are important blood-changes. The spleen becomes soft, liver congested, stomach disturbed, and there are changes very like typhus fever. I believe the disease is contagious in a degree, and I believe it is spontaneous. I formerly believed that poisoning took place from the exudation; but if it does take place in this way, I am now convinced that it is not always so. The disease is constitutional before it is local. The poison is introduced into the system through the lymphatics. The symptoms are best considered under two heads, constitutional and local. The constitutional symptoms, like the local, may be mild or severe. The constitutional symptoms do not always correspond to the local symptoms in mildness or severity. When diphtheria is ushered in with a chill and severe symptoms, it generally terminates quickly. There is often paralysis of the pharyngeal muscles, and when an attempt is made to swallow food or drink it is forced out through the nose. The popular belief is that the throat is filled up; but this is not so. It is not on account of the obstruction in the throat, but on account of the paralysis of the pharyngeal muscles.

As this disease descends into the larynx the symptoms become grave. The voice changes; it becomes hoarse, and finally dwindles to a whisper; the breathing becomes stertorous, and diphtheria, malignant and terrible, stares us in the face. There is difficulty at first of inspiration, and after a little, as the disease advances and descends into the throat, there will be difficulty of expiration. Some cases, instead of beginning in the pharynx, commence in the larynx; but it quickly spreads to the tonsils and pharynx. It is different from croupous laryngitis. There is an exudation, and around this exudation there is a red line. Whenever there is exudation, sooner or later there is enlargement of the surrounding glands. When resolution takes place, the exudation curls on its edges and is removed by a sloughing process, and under this patch is seen the new cellular exudation. There is a rise of temperature at the outset, but the fever quickly subsides. The temperature is a poor guide in this disease. The pulse is of vastly more importance in making a prognosis in diphtheria. There are no stages in diphtheria, no critical days, etc., as in some other diseases. It follows no regular laws. The diphtheritic poison may be so strong, so severe, that the vital powers are overwhelmed, and sudden death is the result. Some cases live but two or three days; others live weeks, and may finally recover. It all depends upon the amount of poison in the blood. When the tongue becomes dry and brown, and the patient sinks into a typhoid condition, death may result from septicæmia. An irregular pulse is a very unfavorable symptom, and when I find it I am cautious about making a favorable prognosis, even if the patient does not appear very ill. Of course, when the exudation enters the larynx, trachea, or bronchial tubes the case is hopeless.

I shall not discuss the value of tracheotomy in such cases. It is not easy to obtain the consent of relatives to have such a step taken. In the country, tubes of proper size may not be at hand, and if the operation is too long delayed it is useless to think of it. In the cities, where surgical instruments and intelligent assistance are at hand, I have no doubt that many lives could be saved by tracheotomy. But, as before stated, the pulse is the great study in this disease. It is the physician's best guide. A rapid pulse does not necessarily make the prognosis grave, but it does when it is irregular. Vomiting at the commencement of diphtheria is not to be regarded as dangerous, but in the last stages of the disease is very serious. Not at the commencement of diphtheria is delirium to be regarded as dangerous, but it is serious after the disease has run awhile. When delirium occurs late in the disease, it indicates that the kidneys are affected. When the exudation becomes dark and black, the case is dangerous. The brown tongue, the stupor, the typhoid condition, the evidence of overwhelming poison, herald the approach of death. In diphtheria there is danger all around us, on every side, from beginning to end. The patient may apparently be getting along well, and you may think the case on the gain,—friends may all be encouraged and hopeful,—but a few hours may make a great change in the sick-room. This terrible poison may suddenly overwhelm the vital powers, and death will swoop down and snatch its victim from before your very eyes.

There are two great dangers in diptheria: closure of the larynx and septicæmia. There are sequelæ to diphtheria which challenge attention. The most common is paralysis. This shows itself in the pharynx and muscles of the throat. There is difficulty in deglutition and a change in the voice, which has a characteristic nasal twang. This is due to paralysis of the pharyngeal muscles. Oftentimes there is paralysis of the lower extremities, and the patient is unable to stand, or he walks in a weak and unsteady manner. Endocarditis may follow diphtheria.

We often hear of some physician, but more often of some irregular practitioner, who has attended a great many cases of diphtheria and never lost a case. This is disgusting to any regular, or indeed to any intelligent physician who has had experience with malignant diphtheria. If one calls every case of sore throat or tonsillitis or pharyngitis diphtheria, he may be able to boast how many cases he has cured. A case of membranous croup need not be mistaken for diphtheria, because the attack is more sudden and the constitutional symptoms are lacking.

As regards the prognosis in diphtheria, it might as well be confessed that it is a very fatal disease. In epidemics nearly fifty per cent. will die. The first of an epidemic is the most fatal. After a while the disease seems to lose in a great measure its malignant character. The cases grow milder, and after the hardest of the epidemic is over the cases are simply diphtheritic sore throat. There are patches in the throat, and the patient may be quite ill for a few days, but there is not the terrible depression nor severe constitutional symptoms found in real diphtheria.

As regards treatment I shall not say a great deal, preferring to have this part of the subject discussed by the members of this Association in order that I may obtain their ideas and opinions. In the fatal epidemic through which I have just passed I have used both local and constitutional treatment. But the more experience I have had with the disease, the more I have relied upon constitutional treatment. A patient with diphtheria should be put to bed and kept there constantly until the disease has ended, even if the case appear to be a mild one. This should be insisted upon. I believe much danger is incurred by allowing a patient who feels pretty well to get out of bed and move about the room. The room should be well ventilated and kept at a temperature of 65° or 70° F., and the air kept moist by having water upon the stove, or by some way of getting steam into the room. The patient should not be required to open the mouth too often. The throat should be exposed only when necessary. Cleanliness should be insisted upon, also frequent washing of the patient and clothes. Antiseptic measures should be carried out, and the sick-room frequently disinfected. No one should be allowed to go into the room except those needed to care for the patient. I allow my patients to wear a piece of pork around the neck, as it is mildly counter-irritant and is a domestic remedy much in vogue. I prefer salt and lard to the pork, and regard a flannel saturated with spirit of camphor and olive oil as better than either. I have little faith in external applications. Blisters should not be used. The danger is increased by blisters anywhere. Ice may be allowed, and small pieces held in the mouth are very acceptable to the patient. Ice may delay suppuration, but does not arrest it. Warm applications are good because they hasten the suppuration, and this is what we want. The forcible removal of the exudation or patch should be avoided. It is like tearing off the scab from a sore. The membrane or tissue beneath the patch must heal before the patch comes away. When the patch is loose or hanging by shreds and annoying the patient, it may be removed to render him more comfortable and prevent swallowing. The use of escharotics I do not believe judicious. Tincture of iodine and nitrate of silver should seldom, if ever, be used upon the throat in this disease. The time-honored remedy, chlorate of potassium, often does good, and is worthy of further trial. After a few days, in some cases, I think that the use of gargles is harmful. The effort made strains the muscles and puts the case back. In such cases the potassium chlorate tablets, allowed to dissolve upon the tongue, answer the purpose well. Small powders of chlorate of potassium, with pulverized gum arabic or borate of soda, may be used by directing that they be placed on the tongue and the saliva swallowed. Carbolic acid and bromine appear to benefit certain cases. The sulphocarbolate of sodium works like a charm in others. Steaming

with cubebs or a little lactic acid in the hot water relieves the pain in the throat and dislodges the mucus and phlegm. The inhalation of medicated vapors and the use of sprays and atomizers should be resorted to, and especially when the patient cannot successfully gargle the throat. The fluid extract of jaborandi, given in often-repeated doses, will often keep the throat from filling up with false membrane. If a case of diphtheria is seen early, a laxative dose of calomel is often attended with good results. Those who believe in the antiseptic theory of treating disease give the bichloride of mercury. But of all the remedies in diphtheria, iron stands at the head. The tincture of the chloride is the preparation used. It acts in diphtheria, as in erysipelas, as a powerful restorative to the blood. Alcohol in some form may be used from the first, and in some cases is a sheet-anchor, inasmuch as it sustains the strength of the patient. Quinine, in my opinion, in even small doses, does harm, and should not be given.

It is of great importance to feed the patient and keep the nutrition as good as possible. Milk, sometimes containing lime-water, may be given as often as the patient will take it. Meat-broths, eggs beaten up with whiskey and milk, gruel, and any nourishing drink, should be administered as often as every two or three hours, night and day. Often, if the patient is asked if food is wanted, he will reply in the negative. The taste is destroyed, and there is no desire for food, and eating or drinking is painful. Therefore the nurse should not depend upon the sick one to call for food, or even ask him about the matter, but use her own judgment if the attending physician has not left directions; she must carry the nourishment to the patient at regular times, the same as the medicine, and insist upon its being taken.

TUBERCULOUS TUMORS OF THE CEREBELLUM IN A CHILD FOUR YEARS OLD—AUTOPSY AND MICROSCOPICAL EXAMINATION.

BY G. E. DESCHWEINITZ, M.D.,

Prosector of Anatomy in the University of Pennsylvania; Ophthalmic Surgeon to the Children's Hospital, Philadelphia; Ophthalmologist to the Orthopædic Hospital and Infirmary for Nervous Diseases.

LIZZIE D., aged 4, was admitted to the Children's Hospital, March 17, 1886, for arthritis of the right elbow and on account of a train of symptoms then supposed to be the result of poor food and general neglect. The following family and personal history was obtained. The father was a peddler, and, except for occasional attacks of rheumatism, a healthy man. The mother had been a hard drinker, and six months previous to this date had become insane. Six children composed the family. The eldest was fifteen, but her prematurely-aged face made her appear many years older. One brother had died of Pott's disease. This child, the youngest, had always easily contracted colds, and eighteen months ago an injury caused the existing arthritis of the elbow. Two months before admission the child began to lose the power of her lower limbs, and when admitted she was unable to stand or walk, but the ability to move the limbs remained. At this time no marked ocular symptoms were noted by the attendants, but gradually it became evident that vision was failing, and a thorough examination revealed the following facts. The pupils were of medium and equal size; ordinary objects were not noticed, but a bright light was perceived. The optic disks were oval, white, and filled in; the nasal edges softened and veiled by a grayish haze; the veins were tortuous. The appearances were those of a beginning consecutive atrophy. There was no anæsthesia; the myotatic irritability was not increased. The appetite, digestive functions, and mental faculties were normal. Examination of the urine revealed that it was alkaline, and on standing crystals of ammonio-magnesium phosphate were deposited; sugar and albumen were absent. For a time no new symptoms appeared, but about the beginning of June the child began to fail rapidly.

On June 17 vomiting and obstinate constipation were marked symptoms, and on June 21 convulsions, tetanoid in type, set in and were more or less constantly present until death took place. On the evening of June 22 the breathing assumed the character usually described as Cheyne-Stokes respiration, and about four o'clock in the afternoon of June 23 the child died.

Autopsy.—No unusual external appearances. *Thorax.*—The heart and pericardium and the right lung and pleural cavity showed no abnormalities. On the left side there were extensive pleuritic adhesions from apex to base. The upper lobe of the left lung was small, shrunken, completely

bound down, and, on section, cut like fibrous tissue. *Abdomen.*—Position of viscera normal. The mesenteric glands were slightly enlarged. In the left kidney there was a wedge-shaped caseous (tubercular) mass. In the remaining viscera no gross lesions were discovered. *Brain and its Membranes.*—There were no changes in the membranes over the upper surfaces of the hemispheres. The anterior surface of the brain was flattened, and incision into the lateral ventricles allowed the escape of a large quantity of clear fluid. At the base of the brain the pia mater was injected and spots of opacity were noted, but there was no lymph or pus. In the right cerebellar hemisphere there was an oblong, yellowish-white tumor, six centimetres long, that penetrated the tissue of the cerebellum to the depth of three centimetres, and whose inner end had pushed its way into the central portion of the middle lobe. In the outer part of the left hemisphere a precisely similar though smaller tumor, two centimetres long and one and a half centimetres deep, existed. Well-marked distention of the optic-nerve sheaths, immediately behind the globe, was present.

Microscopical Examination.—The *optic papilla* was distinctly swollen and contained many nuclei. The cross-sections of the vessels showed that they were not shrunken, while their walls revealed some leucocyte infiltration. The retinal layers were displaced. *Optic nerve.*—The sheath of the nerve was greatly distended, and the intervening space occupied by a net-work of nucleated fibres and many free cells. The fibrous septa which separated the nerve-bundles were thickened, and the nerve-bundles themselves were infiltrated with numerous nuclei, while the separate fibres were granular and indistinct. In the fasciculi of the periphery the most marked atrophy was seen. The retinal vessels were oval in cross-section, but normal in appearance. The same pathological changes obtained throughout the entire length of the nerve, and existed also in those portions of the *optic tracts* which were studied. These were, unfortunately, only a very small part of their terminations in the commissure. In a study of some sections of the *chiasma*, especially such as were stained after the manner of Weigert, there certainly seemed to be a very distinct band of fibres across the anterior border of the commissure which connected the optic nerves on either side. This band would correspond to the inter-retinal fibres the existence of which has been denied by recent anatomists.

The tumors.—These were tuberculous masses which had undergone caseation. Scattered through the finely granular tissue of which they were composed were numerous giant-cells, either well formed or affected by the general caseation. Dr. William M. Gray, of the Army Medical Museum, to whom I am indebted for the preparation of many beautiful sections from these specimens, has succeeded in demonstrating tubercle-bacilli in the larger tumor.

In the *pia mater* of the base of the brain the perivascular lymph-sheaths were fully distended with small round cells. In addition, there were extensive extravasations of blood-corpuscles and a general infiltration with young cells. Sections double-stained with carmine and sulpho-indigotate of potash showed particularly well this beginning tuberculous inflammation of the pia mater.

Lung.—In the upper lobe of the left lung very little true pulmonary tissue remained, and the alveolar walls of that which did exist were densely infiltrated with small round cells. The remainder of the lobe was composed of wavy fibrous tissue, through which, sometimes sparsely, sometimes in rich collections, a round-cell infiltrate was scattered. It seemed to be a tuberculous tissue undergoing fibroid change.

It seems useless to do more than report this case as an interesting example of tuberculous disease of the cerebellum. I will, however, briefly recapitulate for convenience the main points.

1. The pathological lesions were: two tubercular tumors in the cerebellum, the larger involving the middle lobe; beginning tubercular meningitis of the base of the brain; optic neuritis, and later consecutive atrophy of the disks; old tuberculous disease of the left lung; a caseous mass in the left kidney, and arthritis of the right elbow.

2. The symptoms were: the general appearances as if the patient had been underfed and neglected; progressive failure in the power of the lower limbs, without paralysis; blindness from the results of descending neuritis; at first normal

appetite and digestive functions, but later vomiting and obstinate constipation; alkaline urine, which deposited triple phosphate crystals; convulsions, tetanoid in type; and for some hours before death Cheyne-Stokes respiration.

1330 SPRUCE STREET, PHILADELPHIA.

REPORT ON THE PROGRESS OF DERMATOLOGY.

BY ARTHUR VAN HARLINGEN, M.D.,

Professor of Dermatology in the Philadelphia Polyclinic.

IN the present report it is intended to give a general review of the progress of dermatology during the past year, as exemplified in the special journals of this country, France, and Germany. The more important contributions made to the general medical journals during 1886 which have not already been noticed will form the subject of a later report.

The address of the President of the American Dermatological Association at the annual meeting last September has attracted general attention, both from the evidences given of advance in the specialty and also from the outspoken manner in which the claims to a fuller recognition of this branch of medicine are advocated.

Ten years ago the Nestor of American dermatology, Professor White, of Harvard University, said, "Every day we see in the out-patient department and elsewhere cases which we know are requiring attention they will not, cannot receive at home; cases which, without restraint and peculiar management, last indefinitely and spread disease; cases which entail horrible consequences upon others; all of them sure of more rapid and certain recovery if they could receive such hospital care; some of them as surely doomed to years of misery and even speedy death because they do not obtain it. Those who, from love to their fellow-men or pity of their bodily woes, have left large endowments for their care in sickness, they who make generous appropriations from the wealth of States and cities for the treatment of disease among the poorer classes of society, certainly have intended no such arbitrary distinctions. It is not they who have ordained that a fever or a fracture shall have the best chance of recovery by proper nursing and the most eminent professional attention, while an inflammatory or destructive process of the integument shall be debarred from both. There is neither reason nor justice in such action, and they who control the government of such institutions have much to answer for for such unequal distribution of hospital charity."

". . . As now managed nearly everywhere among us, these institutions refuse to a large class of sick persons the benefit of hospital residence either wholly, or offer them, if received, not, we may fairly say, the best medical skill it is in their power to procure."

These stinging words are, unfortunately, almost as true to-day as when they were uttered ten years ago. We have only to look at our hospitals in Philadelphia to-day to see how inadequate—or rather how entirely absent—are all means for the treatment of all diseases of the skin, even such as scabies and pediculosis, so easily cured and yet so torturing to their wretched victims; and how indifferent apparently are their managers to the obtaining of skilled physicians to treat this class of diseases.

The address of Dr. Wigglesworth points out the various needs of dermatology and suggests the means for their attainment, and is altogether a valuable document not only to the specialist in skin-diseases, but to every intelligent physician desirous of measuring the aims and methods of a large and intelligent body of scientific men in his own profession.

When we cast a glance over the general field of dermatological literature for the year 1886, we are somewhat surprised to observe how great attention has been given to a single class of diseases,—namely, the new growths, and particularly lupus vulgaris and leprosy. In the German journals, out of thirty-two original articles (aside from those on therapeutics), no fewer than fifteen were upon the diseases of this class, seven of which were upon the diseases mentioned. In the French *Annales*, out of thirteen articles five were upon new growths, of which one each was upon the diseases mentioned. In the *American Journal of Cutaneous and Venereal Diseases*, on the other hand, out of thirty-two articles only one could be taken as belonging to this class, while fourteen belonged to the class of inflammatory affections.

This contrast shows both the greater

frequency of such affections as lepra, lupus, tuberculosis of the skin, and syphilis abroad as compared with this country, and also the greater interest manifested in France and Germany in the study of questions of etiology and pathology, the attention of our physicians being somewhat more occupied with what are called "practical" questions.

LEPROSY.

The question of the nature and treatment of leprosy continues to occupy much attention both in Germany and in France. In Germany, Unna has been foremost in both pathology and therapeutics, and we most cordially second the wish expressed by another writer, "that his initiative and his arduous endeavors may succeed in substituting for the indifference with which leprosy with all its extensive and increasing diffusion is generally regarded a warm interest in its investigation and cure."

In 1885 Touton published an article on the localization of the bacillus lepræ, maintaining that its seat was in the cells. The peculiar nidus for the development and colonization of the lepra-bacillus is the protoplasm of the cells, and the greater number of all bacilli lie, as has always been supposed, in larger or smaller agglomerations within the cells. These bacillus-agglomerations are therefore not themselves cells, but only parts (inhabitants) of cells. Those agglomerations of bacilli found at large were originally contained in cells. To this Unna rejoined in an article too highly technical to reproduce here even in abstract, and ended by asserting categorically that "lepra-bacilli are never contained in the cells of the tissues."

At the beginning of last year Unna returned to the question in a supplement to the *Monatshefte für Dermatologie* for January. In the introduction to his article he says that we can scarcely find in human pathology a second example of so lavish an abundance of parasitic life in organs remaining so comparatively healthy, and for that reason we can judge better here than under any other circumstances of the physiological relationship between the bacilli and the human tissues.

After giving his method of histological procedure, Unna goes on to discuss the distribution of the bacilli in the skin, their occurrence in the blood-vessels, the convoluted glands of leprous skin, the examination of tissue-juice, where he finds no cells, but plenty of bacilli and agglomerations of bacilli in confirmation of his former views; asks the question, Has the bacillus lepræ a movement of its own? which he answers tentatively in the negative, or at least as "not proved;" the behavior of the bacillus in pus, which he thinks causes atrophy; the nature of the "vacuoles," which he considers thin portions of the cell-agglomerations; and finally winds up his admirable monograph with the following conclusion:

The leprous tubercle is an infectious tumor, to be included among the infectious hypertrophies. Among these it occupies a very peculiar position in that its chief bulk is made up of micro-organisms; it is therefore to be regarded as a bacillar tumor, in which the tissue-changes play a subordinate part.

Unna intends to return to the subject later, in order to discuss the normal issue of this tumor, the atrophic changes in the bacillus, as well as in the cutaneous tissues.

In the same supplement to the *Monatshefte* Lutz adds a brief paper upon the morphology of the micro-organism of lepra.

The question of the contagiousness of leprosy is one of the highest interest, but it seems as far from settlement as ever, in spite of the numerous contributions to the subject which have appeared during the last few years. Two contributions have been made to the subject, however, which are worthy of a brief note. One is in the form of a series of experiments by George Thin, which were undertaken under the auspices of the British Medical Association, but which we find published in the *Vierteljahrschr. f. Derm. u. Syph.*, vol. xiii., 1886, p. 337. Thin cut out small pieces of leprous skin proved such by microscopic examination, and implanted them in the cornea and the skin of healthy apes, cats, etc., but with a negative result, since the animals perished from intercurrent disorders in no way connected with the inoculation. Thin thinks the experiments had not a fair chance. When it is considered how long a time elapses between the perhaps temporary stay of a human being in a leprous locality and the outbreak of the disease in his body after his return to a healthy region, the failure of inoculations in animals must not be re-

garded as conclusive until such animals shall have been kept a series of years under observation.

The second paper bearing on this subject is that of Paulsen (*Monatshefte für Dermatologie*, vol. v., 1886, p. 8), which is simply a brief history of a single case, but which is of especial interest because of the demonstration of the presence of bacillus lepræ in some of the secretions. The patient, among various symptoms, showed narrowing of the upper air-passages by thickening of the lining membrane, which was pale red and covered with muco-purulent secretion. On the bony septum nasi were prominent ulcerating tubercles. Other ulcerative lesions of the mucous membrane of the naso-pharyngeal region were also present. The mucus exuding from these localities was examined by Paulsen, who found bacillus lepræ in large numbers. In the detritus from the ulcerating tubercles in the nose bacilli were found in agglomerated masses looking like cells, but distinct entirely from the cells of the tissues. This observation points out one way at least in which leprosy can be conveyed.

Although belonging to an earlier date than the beginning of last year, Unna's contribution to the therapeutics of leprosy is of such importance in this connection that it may well be added here. It is from the *Monatshefte* for 1885, and is concerned with a well-marked case of leprosy which came under Unna's care and was treated successfully. From his experience with this case, Unna concludes that tubercular leprosy, even when generalized and of over a year's duration, can be cured in a comparatively short time by means of combined internal and external treatment actively carried out. The most useful agents are those called by Unna reducing, and chiefly sulpho-ichthyolate of ammonia, chrysarobin, pyrogallol, and resorcin. Ichthyol is to be employed in strong preparations externally, while the inward dose averages fifteen grains a day. Chrysarobin and pyrogallol are too strong for most skins. Resorcin is useful in a twenty-per-cent. ointment, or, better still, in the form of a plaster. It has the advantage of not smelling badly, of not irritating the skin, and of not irritating the eyes. Pyrogallol is a highly energetic anti-leprous remedy. A five-per-cent. ointment is strong enough in general, but when the skin is resistant a stronger ointment or plaster can be employed. Chrysarobin is the best topical application in leprosy, but especial precaution must be used against its irritating influence upon the ocular conjunctiva. In robust persons chrysarobin may be employed on the body and limbs, avoiding the face and hands. In weaker patients the other remedies should be employed until all has been obtained from them that they will give, and the chrysarobin only used in the most rebellious points of disease.

As a corrective against the toxic effects of the various drugs used, particularly the pyrogallol, Unna recommends the internal use of hydrochloric acid in as large quantities as possible, to diminish the alkalinity of the blood. Salicylic acid plaster and carbolated mercurial plaster may be used as adjuvant local remedies.

Finally, Unna is disposed to think that the radical external cure of the leprosy in the case cited was really internal as well as external, for not only was the patient's general condition markedly improved during the treatment, the nutrition returning to its normal state, but this improvement was manifestly due to the internal administration of the salts of ichthyol, the action of which, combined with its external use, is "gently anti-leprous." The remedy can be used indefinitely, without injury to the patient, until the leprous germs are entirely destroyed. As to relapses, these are no more likely to occur than in syphilis, and, unlike this disease, the treatment can do no harm, however prolonged.

LUPUS VULGARIS AND TUBERCULOSIS OF THE SKIN.

Dr. Felix Bloch, assistant to Professor Neisser, publishes an interesting article in the *Vierteljahrschrift* (Heft ii., Jahrg. xiii., p. 201) on the etiology and pathogenesis of lupus vulgaris. Doutrelpont in 1883 first pointed out the existence of a bacillus in lupus, and his investigations were confirmed by others, Koch asserting the identity of this bacillus with that of tuberculosis, and the consequent relationship of the two diseases. A lacuna in the evidence exists in the fact that lupus cannot be produced by inoculation with the bacillus tuberculosis, and perhaps also in the fact that the bacillus of lupus is not found in such quantity as that of tuberculosis in its specific locality, but, on the

contrary, is infrequent even in lupus tissue. Moreover, Kaposi, the most important opponent of this view, brings forward more than six hundred cases of lupus treated by himself, in very few of which could any scrofulous element or history be found, as well as hundreds of scrofulous patients who were not affected by lupus. Moreover, there is such a thing as a true tuberculosis of the skin.*

This argument from clinical observation Bloch endeavors to meet. To do this he combines the statistics of Neisser's clinic at Breslau with those of Raudnitz of Prague and Pontoppidan of Copenhagen. In Neisser's clinic and private practice combined one hundred and forty-four cases of lupus occurred between Easter of 1877 and November of 1885. These are carefully analyzed in Bloch's paper, and compared with the other statistics as to the sexual relations of lupus, time of first appearance, localization, previous disease, complications, heredity, and, finally, the relation between lupus and scrofulosis. With regard to the very interesting statistics given under the earlier of these heads, want of space forbids us to concern ourselves. A few words, however, may be said with reference to the last point.

"If," says Dr. Bloch, "lupus is a tuberculous disease, we must expect frequently to meet with tuberculous lesions of other organs in connection with lupus of the skin." Recent French writers, as Quinaud and Bésnier, assert this to be the case. Demme also, among the Germans, asserts the same thing, and all bring forth statistics to prove their view.

Bloch arrives at the conclusion that three-fourths at least of all lupus patients suffer from other kinds of tuberculous affections, and in one-fourth of these the tuberculous disease showed itself before the outbreak of lupus.

Leloir, in a clinical lecture (*Annales de Dermatologie et de Syphiligraphie*, t. vii., 1886, p. 328), gives the account of a case, occurring under his own observation, where a lupous nodule of the hand became the origin of a tuberculous lymphangitis, with the production of scrofulo-tuberculous gummata along the track of the affected lymphatics, and, finally, as a result of absorption of tuberculous virus by the lymphatics of the upper limb, gave rise to pulmonary tuberculosis on the side affected. In other cases Leloir has observed reticular erysipelatoid lymphangitis, presenting itself under the form of "white erysipelas" ("scrofulous erysipelas"), appear to play a prominent part in the absorption of the virus. He gives his own statistics, and declares himself a firm believer in the fact that true lupus vulgaris is one of the forms of cutaneous tuberculosis.

Sachs (*Vierteljahrschr. für Derm. u. Syph.*, Bd. xiii., 1886, p. 241) gives the statistics of one hundred and sixty-one cases of lupus treated at the Heidelberg clinic, of which he was able to get an exact history in more than one hundred. The result of his examination agrees with Bloch's statements, particularly with regard to the frequent occurrence of lupus in connection with tuberculosis of other organs than the skin.

LUPUS-CARCINOMA.

That carcinoma may develop in and from lupous tissue has long been known, though the cases on record are few in number. Winternitz, assistant in Pick's clinic in Prague, adds notes of a recent case (*Vierteljahrschr. f. Derm. u. Syph.*, Bd. xiii., 1886, p. 770). It was that of a man, of 45, suffering with diffuse redness of the face, except the nose and forehead, and extending to the right ear, the neck, and the back just about the neck, the surface showing numerous lupus nodules and scars. Various patches of lupus could also be observed over other portions of the body and limbs. On the side of the face, not far from the malar prominence, was a tumor, which, being removed and examined, showed the microscopic appearances of carcinoma. Removal with the knife was followed by rapid healing, and six months later the carcinoma showed no signs of return, although the lupus continued to spread.

TUBERCULOSIS OF THE SKIN.

Riehl and Paltauf (*Vierteljahrschr. f. Derm. u. Syph.*, Bd. xiii., 1886, p. 19) describe an unusual affection occurring commonly on the back of one or both hands, and occasionally also on the extensor surface of the fingers or between the fingers, but rarely on the palm or on the adjoining portions of the wrist. The erup-

* Of course, lupus erythematosus is not taken into consideration, being an independent affection.

tion resembles a patch of lupus, being made up of dull brownish-red pea-sized to coin-sized papular lesions, often grouped in circinate or serpiginous forms, and spreading by the addition of new lesions on the periphery. As the lesion develops, a warty or papillomatous condition forms, particularly in the centre of the lesion, and occasionally superficial pustules form, so that the lesion takes on a crusted appearance, and when the crusts are removed pus wells up from sieve-like openings beneath. The lesion gradually dries up, becomes smooth and flat, and atrophied or scar-like in the centre, while the periphery may continue to develop.

The subjective symptoms are slight. At the height of the disease there is a feeling of tenderness on pressure, sometimes amounting to extreme sensitiveness. The progress of the disease is slow, with stationary intervals. It may be quite extensive, covering the entire back of the hand. More frequently months may pass without any perceptible alteration in the size of the lesion.

The diagnosis of tuberculosis verrucosa cutis must be made by regarding the course of the disease and the various lesions as a whole. Neither the red external ridge frequently covered with pustules, nor the papilloma with its horny covering above and deposits of pus at the base, nor the subsequent cicatricial condition, can be regarded as characteristic, although not occurring in any other affection in the same order and with the same clinical picture.

Lupus verrucosus always gives rise to circumscribed centres of infiltration in the form of brownish-red tubercles, characterized by their comparatively soft consistence and absence of acute inflammatory symptoms. In tuberculosis verrucosa cutis the circumscribed tubercles are absent, and each fresh exacerbation is accompanied by inflammatory symptoms. In addition, there is no tendency to ulceration of the older lesions, such as exists in lupus.

Inflammatory papilloma from injuries or badly granulating wounds are to be distinguished by their varied locality according to the injury, by the absence of inflammatory symptoms, and chiefly by the less acute course followed.

Papilloma following syphilitic lesions, with framboesia-like symptoms, may be distinguished from the affection under consideration by the thick infiltration about the borders and the characteristics of the syphilitic ulcer.

From lupus it is distinguished by the lesions disappearing under pressure, while the nodules of lupus show yellow under the skin as the finger is drawn firmly over them. In addition, lupus generally begins in the young, while the disease under consideration is one of adult life.

The inflammatory papilloma of the skin of Roser and Weil is quite different in appearance and locality.

Leloir's "Perifolliculite suppurée et conglomérée en placard" (*Annales de Derm. et de Syph.*, v. 1884, p. 436) closely resembles Riehl and Paltauf's affection, and they think is a variety of it. They also consider verruca necrogenica as a closely-allied affection.

Pathologically by histological arrangement of the tissues, as well as by the presence of the bacillus tuberculosis, the nature of the disease is settled and its name justified.

The treatment of the disease consists either in excision by the knife, scraping with the curette, or burning out by some appropriate caustic, as caustic potassa, either with or without previous scraping. The wound is afterwards to be healed up under pyrogallic acid or iodoform.

Chiari reports (*Vierteljahrschr. f. Derm. u. Syphilis*) an almost unique case of extensive tuberculous ulceration of the vulva and vagina. The patient was a married woman, of 30, who had never borne children. Dying of some intercurrent disease, Chiari had the opportunity of making a post-mortem examination. He found a large irregular ulcer, with infiltrated irregular, sharply-cut borders, on the right labium, running up to the clitoris and beyond, and extending into the vagina. The ulcer presented the characteristics of tuberculous ulcers, and several other similar lesions were found in the vagina and anus, with numerous enlarged and cheesy glands about the pelvic region.

The affection is to be distinguished from epithelioma and lupus. A microscopic examination showed abundant bacilli tuberculosis.

(To be continued.)

THE Committee on Arrangements announce that proper arrangements have been made to accommodate the various Sections of the International Congress in Washington.

TRANSLATIONS.

HYDATID CYSTS OF THE LIVER.—M. Baudouin in a late paper laments the tardiness of his fellow-countrymen in adopting the modern improvements in abdominal surgery, particularly in regard to the surgical treatment of hydatid cysts of the liver. This question was not seriously considered in France until it was brought before the Surgical Society in 1885.

Acupuncture, formerly recommended by Trousseau, is now rarely employed. Electrolysis, as advocated by Hernot (of Reims), is scarcely any more popular. Simple puncture of the cyst, puncture followed by the injection of some antiseptic fluid, multiple punctures, multiple punctures with incision, simple incision with drainage, and aspiration have all been employed and praised by particular operators, but none have given perfect and universal satisfaction. Boinet was the first to introduce the method of making simultaneously two punctures into the cyst by means of a curved trocar, which was left *in situ* for a few days, and then uniting these two punctures by means of a deep incision made with a bistoury. Boinet's method itself is not employed at the present time, but it has been revived and modified in the various methods of Simon, Verneuil, Kuster, and Hirschberg. Simon made use of *two* fine trocars, left *in situ* for a few days, and as soon as pus began to appear in the fluid evacuated from the cyst he laid open the sac with an incision uniting the two punctures made by the trocar, and injected it with some antiseptic fluid. Verneuil substituted two large trocars for the two fine ones of Simon, and instead of leaving them in place for a few days he used red caoutchouc sounds selected to fit exactly the punctured wounds. Kuster returned to the single curved trocar of Boinet, but modified it with a small opening at the middle of the convex portion. Then about the seventh or tenth day he replaced the cannula with a ligature gradually tightened down upon the parts lying between the two original punctures. Hirschberg endeavored to assure himself more positively of adhesion between the walls of the cyst and of the abdomen by making a number of punctures in the same straight line. We see in all these various methods of the past the tendency from the simple puncture to the free and open incision. It was reserved for Recamier at the age of sixty to assert the superiority of the latter over the former procedures.

Besides the well-known complications, such as urticaria, suppuration of the cyst, abscess of the liver, peritonitis, septicæmia, pulmonary embolism, as well as the possibility of auto-infection through the hepatic vessels, and even of sudden death from a vesicle lodging in one of the cavities of the heart (such a case is reported), the method by puncture does not assure us of a radical cure. We gain nothing by the use of the punctures before making the incision, but we lose much valuable time while waiting for the mural adhesions. It is quite as safe, if not safer, to make an incision, under proper antiseptic precautions, directly through the walls of the abdomen, and sufficiently large in the very beginning, as to have recourse to the production of adhesions by means of punctures.—*Le Progrès Médical.*

OBSERVATIONS UPON NARCEINE.—M. Laborde has been performing some experiments with a specimen of narceine furnished him by M. Duquesnel, who claims that it is almost absolutely chemically pure. At least it contains no morphine nor codeine. Given to animals, it produces a calm sleep, and is tolerated perfectly by the stomach. In doses of 0.02 centigramme in pill form, it overcomes insomnia. In half-centigramme doses it suppresses the spasmodic coughs of pertussis in children. Furthermore, the narceine furnished now by Duquesnel retains all its effective properties without having to increase the dose.

PHOSPHATE OF LIME is strongly recommended by Dr. Rebory for the night-sweats of phthisis. M. Potain, and after him Dr. Rebory, employ the tricalcic phosphate in doses of four grammes, often necessarily increased to eight and fifteen grammes. The excellent results obtained are attributed by Dr. Rebory to some special action of the medicine upon the perspiratory apparatus. It would seem more likely that the general improvement in the condition of the patient brought about by the phosphate should be the reason for the diminution in the night-sweats, one of the symptoms most indicative of the great debility of persons subject to phthisis. L. H. M.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, MAY 14, 1887.

EDITORIAL.

THE IMMEDIATE CAUSE OF SUPPURATION.

THE infectivity of pus and the nearly constant presence of micro-organisms in the products of suppuration have been pretty well established by a large number of experiments. The absolute dependence of suppuration upon the presence of certain organisms has, however, not been generally accepted, although regarded as probable by a considerable number of observers. A recent research undertaken with the intention of determining this point may therefore be of interest to our readers.

Zuckermann, of the University of Kasan, introduced antiseptically into the tissues of white mice, dogs, and rabbits glass tubes containing sulphuric, nitric, acetic, hydrochloric, carbolic, chromic, lactic, and trichloracetic acids, caustic ammonia and potash, cupric sulphate in concentrated solution, mercury, bromine, chloroform, oil of turpentine, tincture of jequirity, croton oil, tar, oil of pine needles, and creasote. Out of thirty-nine experiments, nine only were followed by suppuration. In one of these the material introduced, sulphuric acid, had burnt through the skin, while in a second primary union of the wound had not followed, and secondary infection was possible. The seven remaining cases where suppuration had followed had been inoculated with oil of turpentine, tar, croton oil, bromine, and chloroform. The result in these instances is attributed to the non-sterilization of the materials used.

In another series of twenty-two experiments, pus was formed in only one case, in which non-sterilized croton oil was the inoculating material.

As regards the organisms found in pus, Zuckermann also instituted a series of observations. Microbes were found in the pus of thirty-eight abscesses examined. He collects all observations hitherto made by Rosenbach, Passet, Ogston, Hoffa, Triconi, and others, and, adding his own, finds that in four hundred and ninety-five abscesses staphylococcus pyogenes was present in seventy-one per cent., streptococcus pyogenes in sixteen per cent., and the two combined in 5.5 per cent. Other pus-organisms were found only exceptionally. In four inoculations of pure cultures of staphylococcus pyogenes aureus (by rubbing the same into the skin) an acute abscess was obtained in every case.

The conclusions reached by Zuckermann are that chemical, mechanical, or thermic irritants, if free from micro-organisms, cannot produce suppuration; that the cause of suppuration is one or more of the following organisms: staphylococcus pyogenes aureus, albus, and citreus, streptococcus pyogenes, and in putrid abscesses, bacillus pyogenes fœtidus; and that staphylococcus pyogenes is more frequently present in pus than the other organisms mentioned.

CONCERNING HYSTERIA FOLLOWING TRAUMATISM.

A work recently published, which receives notice on another page, treats upon the interesting subject of traumatic hysteria, or, more correctly speaking, of the hysterical manifestations, such as anæsthesia, paralysis, contracture, etc., following injuries of various sorts. In it the author, Dr. Paul Berbez, says, "The true cause of the hystero-traumatic phenomena is evidently a special condition of the patient's mind; the occasional cause (the traumatism) possessing only slight importance. This condition is not a pathologi-

cal rarity, and if surgeons would study the motility and particularly the state of the sensibility after the reduction of luxations, contusions, etc., they will very probably find a host of cases similar to ours." The symptoms are all of the kind common to hysteria, and are usually met with in patients who have had in their previous history more or less evidence of mental aberration, though this is not an absolutely necessary condition.

In order to study the mechanism of this nervous manifestation, the author takes into consideration three things: (1) the mental condition of the patient at the moment he receives the shock of the injury; (2) the immediate effect of the shock; and (3) the workings of the mind after the shock. "When we shall have studied these three sides of the question, we will without difficulty, we think, be convinced of the following fact: hystero-traumatic paralyses and contractures are in every respect similar to the paralyses and contractures, painful and non-painful, which may be produced in hypnotics by simple suggestion." Indeed, the paralyses are far from being due to either a neuritis or functional disturbance of the nerves: "the injury," he says, "whatever it may be, overclouds the perceptive faculties of the mind; the mind reflects upon the injury as the cause of the inability to move the part, accepts uncontrollably the suggestion of the absence of the injured member, and suppresses more or less abruptly all ideas which it possesses relatively to that member."

RESECTION OF THE PYLORUS.

THE fact that in more than half of the cases of gastric carcinoma the morbid growth is confined to the pylorus and its immediate vicinity, and that autopsies have shown that of the latter a very large number would be amenable to treatment by removal, fully justifies the operation of resection of the stomach in such cases, as first performed by Billroth. The grave prognosis of cancer of the stomach lends further warrant to the performance of this operation, and justifies exploratory laparotomy when there is even a fair probability that the malignant disease is circumscribed and in a favorable condition and position for removal.

In a paper read before the Academy of Medicine in Ireland last February, Dr. McArdle reported a case of this kind, in which, however, the patient died of exhaustion four hours after operation.* In reviewing the subject he showed from statistics of thirteen hundred and forty-two cases of cancer of the stomach that the disease was confined to the pylorus in eight hundred and two, of which four hundred and ninety-six cases were suitable for operation, as there was no involvement of neighboring glands or adhesion to adjoining viscera. He collated the records of seventy cases of pylorectomy, of which sixty-two were for cancer, with thirty-five deaths; eight for simple stricture, with three deaths. The higher mortality of the former was attributed to the frequency of extensive adhesions delaying the operation. These adhesions were studied with regard to locality, and it was found that, in two hundred and eighty-nine cases, the tumor adhered to the pancreas in one hundred and thirty-two, the omentum in eighty, the transverse colon in seventy-two, the liver in four, the small intestines in one. These points of frequent attachment should be taken as landmarks in digital exploration of the pyloric region. He considered operation justifiable under the following conditions:

1. In irritable and intractable pyloric ulcer leading to spasmodic stricture.
2. In simple fibrous stricture.
3. In circumscribed cancer without adhesion to pancreas or transverse colon.

---

* The Medical Press and Circular for April 20, 1887.

THE proprietors of the *Medical and Surgical Reporter* have made arrangements with Drs. N. A. Randolph and Charles W. Dulles to carry on the editorial and business management of the *Reporter*, and also the "Quarterly Compendium and Physician's Pocket-Record." The new arrangement went into effect on the 1st instant. The office of their publications has been removed to the northeast corner of Thirteenth and Walnut Streets, Philadelphia.

DR. J. MILNER FOTHERGILL, of London, will give three lectures on the "Modern Tendency of Disease" at his residence on June 2, 9, and 16, at 4 P.M. Members of the medical profession admitted on presenting their cards. Physicians from America will be especially welcomed.

THE State Assembly of Wisconsin has just appropriated fifteen thousand dollars as a contingent fund to be placed at the disposal of the State Board of Health, to be used in preventing the introduction of cholera into Wisconsin.

NOTES FROM SPECIAL CORRESPONDENTS.

LONDON.

CROONIAN LECTURES AND ORIGINAL RESEARCH—AMELIORATION OF DEATH-RATE IN ENGLAND—BRAIN-SURGERY—LECTURES ON FEVER—CONGENITAL DISLOCATION OF THE HIP—LAWSON TAIT ON SALPINGITIS—DRUMINE—FEES TO MEDICAL WITNESSES, ETC.

THE Royal College of Physicians of London has adopted a scheme for the management of the Croonian Trust which practically amounts to an endowment of research, on, it is true, a very modest scale. The annual income of the Trust Fund has been suddenly raised, by the falling in of leases, to a little over two hundred pounds a year. Up to the present time the Croonian lecturer has delivered three lectures, generally on some topic which had been a favorite study with him, and has received a small honorarium. Very often the lectures have been an excuse for writing a little book, and on the whole the general effect has been to give an opportunity for stating opinions and observations which would have found an outlet in clinical lectures, papers at societies, or addresses to associations or congresses, rather than to stimulate special original inquiries. Under the new scheme the lecturer's honorarium will be one hundred guineas, while a similar sum will be placed at the disposal of "a past or present Croonian lecturer" to "be employed for original investigation."

The "Annual Summary" recently issued by the Registrar-General affords strong evidence that the death-rate in the principal British towns is continuing to decline, and proof that it still remains considerably lower than that of the principal towns in any other country in the world. The death-rate in the twenty-eight chief towns, including London, was 20.9 per thousand. London itself has a death-rate below the average: in 1885 it was 19.8, and in 1886, 19.9 per mille. It is possible, however, that the true death-rate is a little higher than this, for it is six years since the census was taken, and there is some reason to believe that London has not been growing so rapidly during the last six years as during the previous decenniad. When all deductions, however, are made, there can be no reasonable doubt that the death-rate of London is very considerably lower than that of Berlin, Paris, or even New York. In a paper read to the Statistical Society, Mr. Noel Humphreys, of the Registrar-General's Office, has attempted to supply some new data with regard to class-mortality. He showed once more that the factor which controlled the rates both in population and classes was the child-mortality: thus, the annual death-rate among children under five years of all classes is believed to be sixty-one per mille, while in the "upper"—that is to say, wealthier—classes it is only about twenty-eight per mille. Mr. Humphreys was able to show that children born in the Peabody buildings have a better chance of surviving than those belonging to the same class but born in tenement-houses. This advantage is attributed to more effective sanitation; and if the term sanitation be understood in a wide sense, as expressing all the surroundings of an infant, the statement is indisputable. But if understood in a narrower sense as referring to drains, then it is only just to point out that it is the best—that is, the most steady, industrious, and intelligent—artisans who secure rooms in the Peabody dwellings, for which there is a keen competition, and that of course people of this kind take far more care of their children than the idle and intemperate. This opinion finds confirmation in the statement that the annual mortality among children under five years of age in the "general service class" is five times as great as among children of the same age in the "professional and independent class:" it would surely be to ride a hobby to death to

attribute the whole of this enormous difference to the influence of good or bad drainage alone, for this reason, if for no other, that the drainage and water-closets in the houses of the well-to-do are often as bad or worse than in the poorest tenements, where the Sanitary Inspector is omnipotent.

Mr. Victor Horsley has now published statistics of the first ten cases in which he has operated on the brain. The first operation was performed on May 25, 1886, the last on December 17, 1886. Two of the patients have died: one six months after the operation, from recurrence of the tumor; the other nineteen hours after the operation, which was performed as a last resort in a hopeless case of wide-spread paralysis due to cerebellar tumor. As to the wound, immediate union took place in every case, excepting of course the patient who died in nineteen hours. Mr. Horsley is thus fully justified in claiming that the operation of exposing and removing considerable portions of the brain is not to be ranked among the "dangerous" procedures of surgery. Before operating, morphine is administered, and it is found necessary to use very great care in the subsequent inhalation of chloroform, as dangerously deep narcosis may easily be induced, especially in children; the object of giving the morphine is to produce contraction of the cerebral arterioles in order to diminish hemorrhage. Special care is taken to fashion the scalp flap (for the old crucial incision is abandoned) so as to preserve either the temporal or the occipital arteries, and the periosteum is reflected along with the cutaneous structures. The bone is first of all attacked with the trephine, and the aperture in it is enlarged with a circular saw driven by a "surgical engine" (dentist's). After excising the tumor, cyst, or cicatrix, the flap is replaced and completely sewn up, except for one inch at the most dependent part, where excess of fluid can drain away, but a drainage-tube is not used. "I am more than ever convinced," says Mr. Horsley, "that the arachnoid, like the peritoneal cavity, may be trusted to absorb excess of fluid." Strict Listerism is observed for the first four or five days, or until the wound is healed.

The Gulstonian Lectures this year at the Royal College of Physicians were given by Dr. Donald MacAlister, of Cambridge. He is one of the few Senior Wranglers who ever took up medicine, and this course of lectures on the nature of fever makes one regret that fashion has led his predecessors almost without exception to become lawyers or schoolmasters. It would be impossible here to analyze the whole of his argument: it will suffice to indicate in general terms the position which he took up. He looked to the nervous system for an explanation of the phenomena of pyrexia: the body-heat is controlled by a triple nervous mechanism,—(1) the thermolytic or discharging mechanism; (2) the thermogenic or producing mechanism; (3) the thermotaxic or regulating mechanism. Relying on Dr. Hughlings Jackson's pregnant hypothesis, and employing his useful phraseology, Dr. MacAlister shows that the thermolytic is the lowest and the thermotaxic the highest level of development. In cold-blooded animals there is only a thermolytic mechanism; in young mammals the thermotaxic or regulating mechanism is imperfectly developed: a child's temperature is unstable, easily driven up, and almost as easily brought down. In ordinary fever there is a disorder not only of the regulating, but also of the thermogenic, the producing mechanism; when to this there is added a disorder of the discharging mechanism,—when, that is to say, the thermolytic lags behind the thermogenic, thermotaxy being also disordered,—then there is hyperpyrexia. Disorder of the regulating apparatus will produce paradoxical pyrexia, the so-called hysterical fever. In his discussion of the thermogenic apparatus, Dr. MacAlister relied to a great extent on the recent experiments of Professor Wood.

The two other courses of lectures at the Royal College of Physicians lend themselves even less readily to discussion here: both, it is true, dealt with questions of vast practical importance and great pathological interest; but both Dr. Broadbent (in treating of the pulse) and Dr. Priestley (in discussing an intra-uterine death) handled subjects which bristled with details and do not conduct to simple generalizations.

A series of specimens of the so-called congenital dislocation of the hip were exhibited at the last meeting of the Pathological Society here, and gave rise to an interesting discussion. On the whole, the evidence is very strong that the displacement is a congenital deformity due to imperfect development of the bones entering into the joint, but especially of the innominate. In all the specimens the acetabulum was deformed and had an imperfect lip. Dupuytren has recorded one case in which the deformity was transmitted from parent to child, and Mr. Howard Marsh during the discussion mentioned the case of a mother and child who both presented the displacement on both sides. It would seem probable, however, that in a few cases a true dislocation may be the consequence of an attack of the "acute arthritis of infants." When recovery takes place from this somewhat rare disease,—a very rare event, therefore,—the joint may be left in a condition of disorganization, which gradually settles down into a quiescent condition closely simulating congenital deformity. Lastly, it must be remembered that the condition might be congenital and yet not be due to improper development, but to intra-uterine inflammation.

Three cases in which a coil of wire was introduced into an aneurismal sac were reported to the Royal Medical and Chirurgical Society. In one case the aneurism was ab-

ESTABLISHED 1852.

THE

WM. S. MERRELL CHEMICAL CO.,

Manufacturing Chemists.

New York Office and Warehouse,
96 MAIDEN LANE.

Laboratory
At CINCINNATI.

Dear Sir:

We take pleasure in calling your attention to our New York Office and Warehouse, to be established May 1st, at 96 Maiden Lane, below William.

Under the personal supervision of a competent representative, thoroughly familiar with the details of our business and experienced in the introduction and sale of our special productions, we shall aim to make this office a reliable source of information and supply.

Druggists and Physicians in the Atlantic Coast States, and all others who may find it to their advantage to draw their supplies from New York City, are invited to correspond with the Eastern Office.

Inviting your co-operation and support, we are

Very truly, your friends,

The WM. S. MERRELL CHEMICAL CO.

The only Coca Preparation endorsed by the Académie de Medicine of France. } Used in the Hospitals, Cliniques and Public Institutions throughout Europe, and by the entire Medical Profession, since 1863. { Invariably uniform in its results since 25 years.

VIN MARIANI

(ERYTHROXYLON COCA.)

THE MOST EFFICACIOUS AND AGREEABLE OF TONICS AND STIMULANTS, AND WITHOUT ANY UNPLEASANT REACTION.

FORMULA.—VIN MARIANI is the concentrated extractive of the fresh leaf of ERYTHROXYLON COCA and an excellent special quality of Bordeaux Wine, each wine-glassful containing the medicinal properties of thirty grains of the fresh *selected* leaves.

DOSE.—Usual dose is one wine-glassful about half an hour before or *immediately after* each meal; for children, half the quantity.

FOR twenty-five years **"VIN MARIANI COCA"** has been introduced exclusively to the **Medical Profession,** and has invariably given them uniformly good results in their practice. As a strengthener of the nervous system, with especial good effect on the respiratory and digestive organs, it is pronounced superior to any other adjuvant. Owing to the large demand for Vin Mariani, imitations and substitutions are being forced on patients where physicians do not especially specify

→"VIN MARIANI,"←

and we would respectfully call attention to this fact, as being the cause of failure to secure good effects in many cases where Coca is prescribed.

☞ **TREATISE, 53 pages (translated from the French), will be sent gratuitously and post-paid to any Physician mentioning this Journal.**

Price for Vin Mariani is reduced; and where druggists do not keep it, we will supply it to patients by the case of twelve bottles for twelve dollars. Remittance in all cases must be sent with the order.

To physicians, for their own use, a discount will be made.

MARIANI & CO.,

PARIS:
41 Boulevard Haussmann.

127 FIFTH AVENUE,
NEW YORK.

Correspondence from Physicians solicited.

dominal, and laparotomy was performed. After about a foot of wire had been introduced it kinked, and the operation had to be abandoned; the patient died on the fifth day. In another case thirty-two feet of wire were introduced into an aneurism of the arch of the aorta; the patient died on the twelfth day. In the third case thirty-three feet of wire were introduced into a subclavian aneurism; the patient lived a fortnight. In all three cases the greater part of the clot formed would seem to have been loose, and in the third case mentioned it was very small in quantity. In the second case the skin became gangrenous, owing, it was thought, to the pressure of a pad, applied to check hemorrhage, on the firm mass of coiled wire in the sac. Altogether, not a very encouraging series of cases.

Dr. Joseph Coats, of Glasgow, related to the Pathological Society of London a remarkable case—the fourth or fifth on record—in which a hypertrophic goitre was accompanied by secondary growths having the same histological characters in other parts of the body. In this case there were several tumors of the skull, one of which was visible during life as a pulsatile swelling. The goitre had existed for sixteen years.

Mr. Lawson Tait has exhibited to the Pathological Society a series of preparations from fifty-eight patients operated upon by him during 1886 for disease of the uterine appendages. In all he had operated on sixty-three patients; but in four instances the specimens were not in his possession, and the fifth was lost. In the sixty-three cases there were only ten unmarried women; of these ten three had had gonorrhœa, two had been pregnant, and one had endured prolonged attempts to cure anteflexion with stem-pessaries. Mr. Tait described five causes for salpingitis: (1) simple catarrh, (2) exanthemata during puberty, (3) gonorrhœal infection, (4) post-puerperal pelvic inflammation, (5) arrested development of the uterus. With regard to the question of sterility he produced some interesting evidence. Of the fifty-three married women, twenty-three had never been pregnant, though married on an average ten years; sixteen had had one pregnancy followed immediately by pelvic trouble. Fourteen cases remained to be accounted for, all of them women who had had more than one child: eight gave a history of gonorrhœal disease not long before the operation, the average interval between this and their last pregnancy being three years. In the six remaining women the average period between the last pregnancy and the operation was fourteen years. These preparations appear to go far towards proving that in at least the vast majority of the cases the inflammatory affections of the "uterine appendages" which give rise to symptoms sufficiently severe to call for operation also produce structural changes which render the woman sterile.

Dr. John Reid, of Melbourne, Australia, has sent some samples of the alkaloid drumine, which he has obtained from an Australian creeping shrub, *Euphorbia Drummondii*. The plant has a very wide distribution in Australia, and as the mode of preparation recommended is remarkably simple, the alkaloid ought to be sold cheaply. The samples received by Professor Ogston, of Aberdeen, appear to have spoiled on the journey, so that the results were nil. Dr. Reid describes drumine as possessing anæsthetic properties as marked as those of cocaine: it does not cause dilatation of the pupil nor any constitutional symptoms when applied externally. Dr. Lewin has recently shown to the Medical Society in Berlin another local anæsthetic: it is described as a resinous extract prepared from *Piper methysticum*.

One of M. Charcot's patients has attracted a great deal of public attention in London by remaining in a condition of hypnotic lethargy for several weeks. He is a commercial traveller who appears to have come to England in the course of his business, and to have fallen among thieves on the day after his arrival. On the following morning he retired to bed and was believed to be asleep. On the fourth day of somnolence Dr. Keser, one of the physicians to the French hospital, was called in. He found him lying in bed, motionless, and apparently asleep; there was, however, some muscular rigidity, and general clonic spasm was easily produced by any sudden cutaneous stimulus. Dr. De Watteville ascertained that passive movements communicated to the arm (for the man had lost one in the Franco-Prussian war) or legs were continued indefinitely; that when the fist was closed the face assumed a pugnacious expression, and so on, according to the classical descriptions of Charcot. An epileptiform convulsion was produced by galvanization of the nose. At the end of a fortnight he began to show signs of spontaneous recovery, and on the sixteenth day he woke up. He was then suffering from aphonia and left hemianæsthesia and hemiplegia.

A great deal of dissatisfaction has been aroused in the medical service of the army by the issue of a warrant abolishing "relative rank." The officers of the service bear the titles surgeon, surgeon-major, brigade-surgeon, deputy surgeon-general, surgeon-general, and each grade ranked for precedence with certain grades in the combatant branch: surgeon-general with major-general, brigade-surgeon with lieutenant-colonel, and so on. This was called "relative rank." The new warrant abolished "relative rank," but, according to the solemn assurance of the Secretary of State for War, left the position of the medical officers unaltered, the term "relative rank" being, it was said, meaningless. This produced a state of things which "no fellow could understand:" so a new para-

graph has been promulgated restoring relative rank, if not in name, at least in reality, if it be a reality. The medical officers, however, refuse to be satisfied, "for," say they, "relative rank having been officially declared to be meaningless, it is not worth having."

The Medical Society of Wigan in Lancashire has taken up the subject of the fees paid to medical witnesses in the law courts. The scale of fees and allowances was fixed in 1858, and during the thirty years which have intervened a great many things have happened. The purchasing power of money has decreased, and facilities for communication have enormously increased. A practitioner is liable to be summoned to attend the court from day to day until the case he is engaged in is called on, and the only remuneration he can claim is one guinea a day, two shillings a night for lodgings, and second-class railway-fare. Setting aside the loss of practice, which is of course the most serious consideration, it really comes to this: that a medical practitioner summoned as an expert witness may easily find himself, when he has paid hotel and other incidental expenses, out of pocket. No reasonable increase in the scale of fees would completely compensate him for the loss of time and connection. The reform most urgently needed is an alteration in the mode of summoning medical witnesses, so that they should not be called upon to attend until they were wanted.

Some years ago the Grocers' Company, one of the richer livery companies of the city of London, established some scholarships in pathology, and from time to time one of the "Research Scholars" turns up in London to give some lectures on his researches. This year Mr. W. North, formerly Sharpey Physiological Scholar in University College, who has been studying malarial fevers in Italy, is giving a course of three lectures on their general history, the special local conditions found in the province of Rome, and on their etiology and pathology.

So many schemes for the improvement of "university education" in London have been floated within the last two or three years, and each one is so zealously defended by uncompromising advocates, that any spontaneous agreement appears to be out of the question. The Privy Council will probably receive some half-dozen applications for new charters, and under these circumstances it is expected that a Royal Commissioner will be appointed to report on the whole question, with perhaps special reference to the position of the medical schools in London.

DAWSON WILLIAMS, M.D.

DR. JOHN ASHHURST, JR., has been elected one of the Attending Surgeons of the Pennsylvania Hospital, to succeed Dr. R. J. Levis.

BALTIMORE.

THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND—THE YELLOW FEVER INVESTIGATION—POISONING BY OIL OF TANSY—"TWO COMEDIES"—ITEMS.

THE ancient Medical and Chirurgical Faculty of Maryland held its Eighty-Ninth Annual Convention last week, under the presidency of Dr. George W. Miltenberger. The sessions lasted four days, and a fair amount of good scientific work was done.

The financial condition of the faculty is not one of great prosperity. There is a deficiency in the treasury amounting to $276.27, partly owing to unusual expenses last year, and partly to the slowness of members in paying their dues. The total gain in membership during the last year was *one*,—a very unsatisfactory showing.

The library has been considerably increased during the year, there being now nearly ten thousand numbers upon the catalogue. With energy, tact, and hard work this number could, and should, be doubled. There are numerous scattered collections of medical books in this State which ought to find a home on the shelves of this library.

The State Medical Society of Pennsylvania sent a fraternal delegate in Dr. W. B. Ulrich, who was cordially received, and made a short speech full of good wishes from his associates.

Dr. Miltenberger, in his presidential address, reviewed the progress of medicine since he became a member of the faculty, nearly half a century ago. He discussed the relations of specialism and specialists to the general profession in a fair and dignified manner, and concluded with an eloquent quotation from a recent address of Sir James Paget.

The annual oration was delivered by Professor William H. Welch, of Johns Hopkins University, who chose as topic "Modes of Infection." He spoke of the advances made in demonstrating the bacterial nature of infectious diseases. From the positive knowledge we have of the modes of infection in some of these diseases, we are justified in concluding that all spread in a more or less similar manner. In cholera and typhoid fever the infectious agent is reproduced in the intestinal canal, and is given off from the body in the intestinal excretions. Dr. Welch believes that the cholera and typhoid fever poisons are capable of conveying the disease at the moment they are discharged in the intestinal excretions of the sick. No further development of the organism outside the body is necessary to render it infectious.

In the exanthematous diseases the infective agent is given off from the skin; in others possibly in the expired air. Hence, in preventing the spread of infectious diseases we must take account of the channels through which the disease-germs are thrown off.

Dr. Welch closed his excellent address as follows:

"What can be more instructive, or, indeed, more encouraging, than to witness the manner in which Asiatic cholera, during its present journey, has failed to secure any foothold in those European cities which are characterized by cleanliness and proper sanitary arrangements, although it has been repeatedly introduced into such cities? Those cities have secured their immunity not by spasmodic precautionary efforts after the entrance of the disease, but have done so by systematic and vigilant exertions during what may be termed the time of peace. Without wishing to pose as an alarmist, I believe that, with the announcement of the appearance of cholera at the borders of our country, the time has come to emphasize the fact that the only enlightened and civilized public policy is to put our house in order before danger is actually knocking at the door. We are only upon the threshold of a deeper insight into the nature of a class of diseases which have been more devastating to the human race than any upheavals of nature or any wars. They have left their imprint upon the political, the social, and the intellectual history of the world. One need not be of a too sanguine temperament to hope that our steadily-increasing knowledge will bear fruit, not only as has hitherto been the case in the prevention, but also in a system of causal therapeutics of these diseases. Then will be fulfilled that pious wish of enlightened practitioners of medicine in all ages of the world."

Dr. J. E. Michael, from the Section on Surgery, reported the details of nine cases of external perineal urethrotomy without a guide. The strictures requiring the perineal section were due, in one case, to perineal contusion, in five cases to sequelæ of gonorrhœa, in two cases to old fractures of the pelvic bones, and in one case to a recent fracture of the pelvis. All the patients recovered from the operation, although one died from tuberculosis six months after the operation, and one about a year after from cancer of the genital organs. Dr. Michael's experience has taught him that it is unnecessary to keep a catheter in the bladder after this operation.

From the Section on Practice of Medicine Dr. S. C. Chew reported upon Bergeon's treatment for consumption and upon strophanthus. In one case in which he had used the rectal injection of gas the patient was much improved. Strophanthus he regarded as a valuable addition to our list of heart-tonics.

The Section on Obstetrics reported through Dr. Wilmer Brinton, who presented a review of the recent progress in the art, and made a strong and timely plea for a more exact knowledge of obstetrical science and art by the general practitioner.

The Section on Therapeutics reported upon "Antipyretic Drugs and Cold-Water Antipyresis" through Dr. I. E. Atkinson.

Dr. A. B. Arnold read the report of the Section on Psychology and Medical Jurisprudence, selecting as his topic "Moral Insanity." He related a remarkable case which seemed difficult to account for except upon the theory that the moral obliquity of the individual was the result of disease. Such patients, he said, had a preponderance of inferior appetites, which they gratify. They are strangers to virtuous impulses. When taken to task for wrong-doing they give cunning reasons as excuses for their conduct. They evince a recklessness which would appall other people. They are against all laws. All they care for is the accomplishment of their own designs. When such people grow up they are averse to any regular occupation. Moral imbeciles exhibit a faulty judgment and a want of appreciation. The difficulty is to make a diagnosis between moral insanity and moral depravity. The history of each case must be the guide. If a man who has been a good, kind neighbor and moral man suddenly changes to a bad, cruel man, it may be assumed that this sudden change is morbid. A man who grew up good and then suddenly changed to bad must have done so as the result of disease. Men who are diseased morally may ruin themselves and families in consequence of it, and still retain their business and other traits. The difficulty of diagnosis in these cases is no greater than in the case of other obscure diseases. There are now quite a number of morbid phenomena which will be guides in deciding cases of moral insanity. As experts on the witness-stand physicians are liable to get into trouble, and it is their duty to give great study to such cases in order to give reasons for their conclusions. The difficulty in detecting such cases will be lessened in the future.

Dr. J. J. Chisolm, from the Section on Ophthalmology, described some simple methods for the ascertainment of ordinary eye-defects; and Dr. Randolph Winslow reported for the Section on Anatomy on Operations on the Round Ligaments of the Uterus.

Dr. Samuel J. Fort read a volunteer paper, in which he gave an interesting account of a remarkable case of abnormal memory. The individual is a congenital imbecile, and is now 43 years old. The memory is the only remarkable trait in this otherwise ordinary imbecile. He could compile a complete directory of those whom he had met during forty years of his life. He is very apt in remembering location and direction. Once passing over a road suffices to impress the surroundings indelibly upon his memory. What he reads is his apparently forever. Mention but the title of a book he has read, and he will repeat the entire contents. Mention an incident of a tale, and he will give the title and the rest of the tale. He has no

power to classify or generalize the things he remembers.

A paper on "Keratosis Senilis and its Relations to Epithelial Cancer" was read by Dr. George H. Rohé. He described keratosis senilis as small collections of epithelium variously distributed upon the face, trunk, neck, and extremities of elderly white persons. These collections usually occur in the form of roundish or irregular, slightly elevated, brownish or blackish patches. Sometimes they are dry and hard, but oftener the patch is greasy to the touch, soft, and easily scraped off with the finger-nail, leaving a moist or slightly-bleeding base. When rubbed or scratched off, the patches rapidly re-form, causing those affected much annoyance and often uneasiness by their persistence.

Physicians generally regard this as a trifling ailment, and pay no attention to it; but careful observation will show that not rarely the constant epithelial hyperplasia results in an atypical formation which eventuates in malignant ulceration. It therefore demands more attention from the profession than it has heretofore received. Prompt and appropriate treatment is not only desirable for its cosmetic effect, but may often save the patient much suffering and even prolong his existence.

When there is no induration present, the patches should be softened with some indifferent ointment, such as cold cream, vaseline, or cosmoline, then washed with soap and water to remove all the epithelial accumulation. Soft soap or *spiritus saponis kalinus* may be needed for this purpose. Afterwards an ointment containing sulphur and salicylic acid may be applied nightly, with success in most cases. The formula generally used by Dr. Rohé is—

℞ Acidi salicylici, gr. x–xxx;
Sulphuris præcip., ʒss–i;
Pulv. amyli triturat., ʒss;
Ungt. aquæ rosæ, ʒi.—M., ft. ungt.

If after six to eight weeks' persistent and regular use of this the epithelial accumulation returns, the patch should be lightly cauterized with caustic potash solution (1 : 2) or the thermo-cautery. If there is infiltration of the skin, the curette, thermo- or galvano-cautery, or electrolysis should be used, and the patch treated in all respects as a malignant growth.

The officers elected for the coming year are: Drs. I. E. Atkinson, President; C. H. Jones and James Carey Thomas, Vice-Presidents; W. F. A. Kemp, Treasurer; and G. L. Taneyhill, R. T. Wilson, Joseph T. Smith, and E. E. Mackenzie, Secretaries.

A communication from the chairman of the Finance Committee of the International Medical Congress was referred to a committee of twenty, who were empowered to collect subscriptions to aid in defraying the expenses of the Congress and forward the same to the proper officer of that organization.

An earnest appeal in favor of the Rush Monument fund was made by Dr. Rohé, the chairman of the local committee for this State.

Dr. George M. Sternberg, of the army, the eminent bacteriologist, who has been on duty as attending surgeon in this city for several years, has been appointed by President Cleveland as Commissioner to Brazil and Mexico to investigate the inoculations against yellow fever practised in those countries. This action was foreshadowed in the *Times* several weeks ago. Dr. Sternberg sailed for Brazil on the 4th instant.

At the last meeting of the Medical and Surgical Society Dr. Wilmer Brinton reported a fatal case of poisoning by oil of tansy taken with the object of producing abortion. The exact quantity taken could not be ascertained. The patient, soon after taking the drug, was seized with vomiting, followed by convulsions and collapse. She died within thirty minutes of swallowing the poison.

A case of poisoning by the same drug was related by Dr. Streett. This patient recovered. The symptoms were somewhat similar to those in the first case.

Dr. Frank Donaldson, Jr., who is well known to the profession for some excellent scientific work in physiology and laryngology, has lately made a venture in dramatic literature. He has written "Two Comedies: An Ill Wind, and An Abject Apology." The two works are published in an exquisitely-printed, vellum-bound volume from the press of Cupples, Upham & Co., of Boston. The dialogue is bright, the interest well sustained, and what there is of plot is wrought to a satisfactory climax in each instance. The little book will furnish a pleasant hour of relaxation from the burdens of professional work.

The new Marine Hospital, described in the *Times* some months ago, has been opened for the reception of patients.

The Woman's Medical College conferred the degree of M.D. on two candidates last Monday.

G. H. R.

BALTIMORE, May 4, 1887.

PROCEEDINGS OF SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

THURSDAY, APRIL 7, 1887.

The President, THOMAS M. DRYSDALE, M.D., in the chair.

DR. B. C. HIRST read a paper on

THE ETIOLOGY AND TREATMENT OF CASES OF SO-CALLED LATE INFECTION IN THE PUERPERAL STATE.

He said: The title of this paper is, I fear, too pretentious. Its object is merely the brief relation of four cases of so-called late infec-

tion in the puerperal state,—all, I believe, due to the same cause, all yielding to the same treatment, and conveying therefore a lesson of some little interest and value. The first case was a young primipara, delivered without difficulty after a moderately long labor. She left her bed on the eleventh day, having had no fever and having manifested no unusual symptom. Two days afterwards her cervix was exposed to view by means of a bivalve speculum, and a slight laceration was discovered, healing by granulation. The following morning, the fourteenth day after delivery, the patient was unwell; her temperature was 102°. Large doses of quinine were given, but the temperature rose to 103°, where it remained, with slight morning remissions, for two days. A more careful examination being made, it was discovered that the uterus was unusually large, that the os was patulous, that there was a foul-smelling discharge and considerable abdominal tenderness. The history of the case, with these symptoms, pointed to the retention of membranes, possibly a portion of placenta, and their subsequent decomposition, originated by the admission of air to the vagina and uterus by the use of the speculum. Acting upon this diagnosis, the uterine cavity was lightly scraped out with a dull curette, and a large quantity of decomposing decidua removed. This was followed by an intra-uterine injection of bichloride of mercury through a Bozeman's double catheter. The woman's temperature at the time was 103°. The following morning it had sunk to 99°, and within twenty-four hours was normal, and so remained.

The second case was also a primipara. The labor was terminated by the forceps. Upon the eleventh day the woman, although perfectly well until that time, had a morning temperature of 101°, rising in the evening to 102°. The uterus was found larger than it should have been. The os was patulous, and there was a fetid discharge. Profiting by the experience gained in the first case, the uterus was curetted and a considerable amount of decidua removed, and an intra-uterine douche given. In this case the womb almost at once contracted and the discharge ceased; but the patient had, unfortunately, an exacerbation of tubercular trouble in one lung, which kept the temperature high for some days.

In the third case, also a primipara, after an instrumental labor and an apparently normal lying-in, the temperature rose on the twelfth day to 99.8°, and on the day following to 100°. At the same time a fetid, muco-purulent discharge made its appearance. In this case a very large quantity of decidual membrane was removed, and the scraping was repeated on the following day, whereupon the temperature fell to normal and the discharge ceased.

The fourth case was a primipara, who on the sixth day, after an easy labor, had a temperature of 100°, although previously there had been no fever. The uterus here was very large, the os quite patulous, but in this case there was not much discharge. The same treatment was employed that had proved successful in the other cases, with the result of reducing the temperature within twenty-four hours to normal, where it remained.

Now, this experience is entirely too limited to enable one to come to a definite conclusion as to the cause of late infection in the puerperal state; but these cases suggested to my mind the possibility at least that the retention and subsequent decomposition of shreds of membrane or fragments of placenta will be found to be the most frequent cause of fever late in the puerperal state, and that, if not interfered with, this condition may lead to septicæmia and pyæmia. Other causes of fever late in the puerperal state are of course well known. Partially-healed wounds of the cervix, vagina, and perineum may be torn apart, and the fresh wounds thus produced may give entrance to the germs of septicæmia. Exposure to an atmosphere impregnated with emanations from sewers or water-closets from bad sanitation may give rise to febrile diseases at any time during the puerperium, as proved in the cases related by Dr. Playfair in a recent English journal. There is a possibility that the pyogenic micro-organisms which may carry on their work in the uterine cavity without very serious consequences to the patient may in the tubes manufacture their product, pus, in such quantities that it cannot be drained off, thus producing an abscess that may possibly open into the peritoneal cavity. There is a still more remote possibility that a pyosalpinx may be developed late in the puerperium by other pathogenic micro-organisms, by those of gonorrhœa, of tuberculosis, or even those of actino-mycosis. Finally, any of the febrile diseases that may attack a woman at any time may fasten themselves upon her during the lying-in period; but, as I have already said, it seems to me that the most common cause of late infection in the puerperal state is the decomposition of retained membrane or fragments of placenta, and that therefore the curette and the intra-uterine douche might be employed as a routine treatment in all cases where there occurs late in the puerperium fever associated with a large uterus, a patulous os, and a foul-smelling discharge. This treatment can do no harm, but may effect much good. My own experience in this direction is, however, limited, and upon this point I would like to have the opinion of the Society, whose experience, collectively and individually, must be greater than my own.

THE ANTISEPTIC PAD.

Dr. HIRST exhibited the antiseptic pad used by Richardson, of Boston, and Garrigues, of New York, to prevent the entrance of pathogenic germs to the vagina after labor.

Dr. PARVIN declared that he was not impressed with the necessity for the antiseptic pad, believing that as good results could be had from antiseptic napkins. The oiled silk or muslin used in making it, it seemed to him, might hinder the ready escape of the lochia. After labor, the vagina is practically a closed canal, open only for the egress of uterine discharge, and disease-germs cannot enter unless that canal be opened by some manipulation of the nurse or the physician, as in giving a vaginal injection or in making an examination. It seemed to him needless to close the vulva completely, and it also seemed possible that closure might hinder the escape of the lochia. But, be this as it may, if the vulva is carefully washed twice a day with an antiseptic solution, and if napkins that have been wrung out of a one-to-two-thousand corrosive-sublimate solution are applied over it, changing them more or less frequently, according to the amount of the flow, he thinks as good results can be had as by using the antiseptic pad. Moreover, it seemed to him doubtful whether antiseptic pads, though they have proved very useful in maternities, will be readily accepted in private practice, especially in the country.

In regard to the results in hospital practice from the use of antiseptics, he has no doubt of their value and should insist upon their employment. So, too, in private practice he has used them for some years; but it is only comparatively recently that he has learned how they should be used.

Dr. Parvin objects to the glass tubes for intra-uterine injections. Take, for example, Chamberlain's, and especially that of the late Albert H. Smith, and they will be found too large for use in some cases where injections are required. Then, too, the liability of glass to break is to him a conclusive argument against the introduction of an instrument made of this material into the uterus or into the vagina. The best instrument he believes is Bozeman's catheter. Formerly it was his custom to wait in cases of septic infection until the flow was offensive, and then at first to endeavor to correct the condition by vaginal, before resorting to uterine, injections. He now knows that is wrong, for the patient may perish or have a protracted illness and then make but partial recovery without the lochia at any time having an offensive odor. Within a year he has seen in hospital practice and in consultation eight cases of septic infection where the happiest results were promptly had from antiseptic solutions injected into the uterus. Most, if not all, of these patients probably would have recovered without these injections; but their recovery, judging from similar cases previously observed by him, would have been slow, possibly imperfect, and after a more or less prolonged period of suffering upon their part and of anxiety on the part of the practitioner. We have in antiseptic uterine injections the essential and the almost invariably successful treatment of puerperal septicæmia, if this treatment be begun soon enough and properly carried out.

Dr. BARTON inquired if the antiseptic pad was applied dry or moist.

Dr. T. M. DRYSDALE, while conceding the importance of antiseptic precautions in hospital, thought the advantage of these measures in private practice more difficult to prove. Until he relinquished obstetric practice in 1874 he had met with but five cases of puerperal fever in over two thousand deliveries, and in none of these women were any antiseptic precautions used other than cleanliness, as they were not then known.

Dr. LONGAKER believes with Dr. Hirst in the great utility of intra-uterine post-partum medication. Dr. Hirst has neglected to notice an agent in which he (Dr. Longaker) has the greatest confidence: iodoform, as used by Ehrendorfer, of Vienna, in the form of one-hundred-grain pencils. One of these is introduced into the cavity of the womb after irrigation; it dissolves very slowly, and continues to medicate the entire utero-vaginal canal for forty-eight or seventy-two hours.

In removing shreds of membrane after labor at term or after an incomplete abortion, he uses the finger, and prefers it to any form of curette he has used. Theoretically he would prefer a glass tube for intra-uterine irrigation, chiefly for the reason that it is more easily cleansed and kept clean. Hitherto he has always used the Bozeman cannula, the only objection to which is the difficulty of cleansing, and hence a possible danger of carrying sepsis directly from one case to another.

Dr. BAER emphatically endorses what has been said in favor of Bozeman's tube for intra-uterine irrigation and against the glass tube. The return-current is sure, and the small size of the instrument as compared with that of the glass tube renders its introduction easy and safe.

Regarding the pad exhibited by Dr. Hirst, if he believed the theory that the atmosphere is constantly impregnated with germs which poison whenever they come in contact with open vessels, he would certainly advocate the use of an impervious covering for the vaginal orifice. For the theory teaches that where there is no contact with the air there can be no sepsis. But he does not believe this fully. Therefore he thinks it safer to place the napkin under, and not over, the vulva, so as to permit as perfect drainage as possible, thereby giving free exit to the lochia by making of the vagina a drainage-tube,—its natural function after parturition.

Dr. HIRST remarked that the pads were used dry by Dr. Richardson and moist by Dr. Garrigues.

(To be continued.)

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

STATED MEETING, MARCH 28, 1887.

The President, LAURENCE JOHNSON, M.D., in the chair.

REMOVAL OF SOLID UTERINE AND OVARIAN TUMORS BY LAPAROTOMY, WITH CASES.

DR. MATTHEW D. MANN, of Buffalo, read the paper by invitation. He said the cases were not selected ones, but constituted his whole experience with such tumors. Three were cases of solid tumors of the ovaries; four were pedunculated fibroids of the uterus; two were fibroid enlargements of the uterus, requiring removal of the whole organ; the body of the uterus was removed also in another of the cases. More interest was attached to some than to others. Case III. was one of round, solid sarcoma of the left ovary, soft and friable. Had he recognized during the operation the ovarian rather than the uterine character of the tumor, he probably would have tied and dropped the pedicle. As it was, the clamp was applied, and after the clamp was taken off, and there seemed to be no strain upon the attachments, the bowels were moved, and this was followed by rise of temperature and pulse. Trouble with the pedicle was suspected, and it was found that the remains of the sloughing pedicle were attached to the broad ligament, while the fundus uteri was still attached to the lower edge of the incision. It was necessary to tear this loose. Hemorrhage occurring from the fundus, supravaginal hysterectomy had to be performed. The patient died of septicæmia the third day after this operation. Of the ovarian cases the first was an adeno-cystoma, the second a fibroma, and the third a sarcoma.

Dr. Mann saw the fourth patient first in 1882, and again in 1884. The diagnosis of either a solid ovarian tumor or a uterine fibroid was made. At the operation the tumor had the appearance of neither a fibroid nor a cyst. The pedicle was very short, thick, and vascular. A clamp was employed, and the pedicle was treated by the external method. A rent of the rectum took place during the operation from adhesions, and fluid entered the peritoneal cavity. This was due to retention of an enema which the nurse had given just before the operation. The tumor was a fibro-myoma. The patient made a good recovery.

Case V. was that of a woman, aged 33, the mother of six children. She had first noticed enlargement of the abdomen three years before the operation. Only latterly menstruation became too frequent, and she emaciated. The whole abdominal cavity up to the ribs was found filled with a tumor. There was a sensation as of ballottement. The tumor was found to be nearly solid, attached to the fundus of the uterus. It had a small pedicle. The tumor was divided before removing it. He thought of treating the pedicle by the external method, but unfortunately he changed his mind, tied it, cauterized its surface, and dropped it. The tumor was a soft myoma. In the evening the patient was about to go into collapse, and on reopening the abdomen the silk ligature was found to have slipped off entirely, and the patient was dying from hemorrhage. A clamp was now applied, and the patient was finally discharged cured. The principal point of interest in this case was reopening the abdomen for hemorrhage. He was sure that cases had been left to die where reopening of the abdomen and securing a bleeding point would have saved them. In this case the kidneys during the state approaching collapse failed to act properly, and the beneficial effect of an injection of hot water into the rectum, where it was retained, was manifest.

Case VI. was one of large uterine fibroid, involving the whole body of the uterus, producing great suffering. Supravaginal hysterectomy was performed; the clamp was applied. The patient made a good recovery from the operation and from the symptoms which had rendered life a burden.

Case VII. was one of myomatous enlargement of the body of the uterus, weighing about five pounds. The patient made a good recovery.

Case VIII. was one of fibro-cyst of the body of the uterus, from which nearly two quarts of pus were evacuated. The peritoneal cavity was thoroughly cleansed before closing the wound. The clamp was removed from the stump on the tenth day. The patient made a good recovery. A curious fact in the case was that the woman had become pregnant, and was delivered somewhat prematurely only a short time before the operation. Considering the condition of the uterus, it seemed strange that she should have become pregnant at all.

Dr. Mann said, in his concluding remarks, that the general profession labored under the belief that solid tumors of the uterus and ovary were beyond surgical reach, unless in the former they presented at the os. It seemed to him, however, that the removal of these tumors was no more dangerous than the removal of cysts, and the results of other operators did not differ much from his. The diagnosis was more difficult. But exploratory incision in many cases was less dangerous than leaving the case alone. As to the diagnosis of adhesions, length of pedicle, and attachments to other organs, he did not believe that any physician could do more than guess until after the abdomen was opened. He quoted approvingly the indications for the operation summarized by Keith, and said that all of his cases might have fallen under one of those classes except one, and for that one he thought another class might justly be made,—namely, that fibroid tumors, no matter what their size, which, by their presence

causing pain and suffering, were wearing out the patient, should be removed.

He would add another class of cases calling for supravaginal hysterectomy,—namely, sloughing intra-uterine fibroids which had already given rise to septicæmia, and the enucleation of which would only add to the danger by affording a new avenue of absorption. In only one of his cases could removal of the uterine appendages instead of removal of the uterus have been seriously considered, and in this case it was a question whether the operation would have had any effect upon the tumor. He could not but consider that some share of the success of his operations was due to the use of Wilson's clamp. It was needless to say that the strictest antisepsis was observed, and he placed the nail-brush and soap among the first on the list of antiseptics.

He suggested that the discussion be limited to the advisability of reopening the abdomen for hemorrhage and pelvic infection, removal of the uterus for myofibromata, and the treatment of the pedicle in supravaginal hysterectomy and myotomy.

DISCUSSION.

Dr. C. C. LEE was asked to open the discussion, and said he agreed in the main points made by the author of the paper. He did not quite agree with him as to the indications for the removal—either by hysterectomy or by other methods of laparotomy—of uterine fibromata in as wide a latitude as he had described. He believed that in all cases of solid growths of the uterus, where there was a chance of arresting nutrition of those growths by removal of the uterine appendages in young women, that method should be thoroughly considered before removing the tumor or uterus itself, and for this reason, that there might be a superitoneal fibroid in addition to the one removed, or others might develop subsequently. Dr. Lee had never had occasion to regret reopening the abdomen for hemorrhage.

Dr. JAMES B. HUNTER said with regard to the treatment of the pedicle of solid tumors that he was strongly in favor of the plan advocated by Dr. Mann,—viz., the external. He preferred the elastic ligature. Dr. Mann had been fortunate in seeing so many solid tumors. Dr. Hunter had diagnosticated and removed a solid tumor of the ovary within a year, the patient making a good recovery. He thought Dr. Mann should not remove the clamp so soon, at least in some of the cases.

Dr. W. GILL WYLIE thought there could be no question of the propriety of reopening the abdominal cavity in suspected hemorrhage, and he suggested that when hemorrhage was feared a drainage-tube be introduced and carefully watched. He had resorted to this precaution in one case, but the assistant did not examine it often enough, and before the hemorrhage was discovered the patient was nearly in collapse. But the vein was tied and the patient recovered. He thought, with Dr. Mann, that it was risky to tie the pedicle of a muscular tumor. As to the indications for removal of the solid tumor, definite rules could not be made. For instance, in one case he found salpingitis complicating the fibroid of the uterus, and it would be difficult to say which condition was the chief cause of the woman's sufferings, and which should be removed. He would not hesitate to operate for a solid tumor any longer than to operate for a cyst, if the symptoms demanded it. He preferred the serre-nœud to the elastic ligature and other measures. Instead of loosening it the eighth or ninth day, he tightened it until it had gradually cut off the pedicle.

Dr. P. F. MUNDÉ had operated in only two cases of solid tumor of the uterus,—one being a fibroid, weighing seventeen pounds, the other a myoma. In the first case the operation was performed because the patient had become addicted to opium for the relief of pain. The pedicle dropped off on the sixteenth day. In the second case separation of the adhesions led to rupture of the mesentery and intestine. Secondary hemorrhage took place twenty-four or thirty-six hours after the operation. The abdomen was reopened and the hemorrhage arrested, but the patient died of exhaustion in spite of transfusion of a saline solution.

As to diagnosis in case of myoma, it was not easy, but it could be distinguished from ovarian cyst by the thick abdominal walls; in cyst of the ovary of rapid development the walls were thin. We need not be in haste to operate for myomata of the uterus. Dr. Sims recommended an operation in one case some years ago, but the patient refused, and was to-day in the lecture-field. He had met with several cases of solid ovarian tumors, but had not operated.

Dr. LIEL remarked that Dr. Sims had operated upon two cases of solid ovarian tumors within the past year. In one the tumor weighed about ten pounds, in the other about two pounds. The patients recovered.

Dr. MANN said that in removing the clamp on the eighth or ninth day he substituted for it an elastic ligature to cut it off. He doubted whether Dr. Mundé's suggestion as to differential diagnosis would hold.

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting of the Academy was held April 7, 1887, the President, A. JACOBI, M.D., in the chair.

The Council recommended that a certain member be notified of the disapproval of the Academy of his action in endorsing a proprietary article. The report was adopted.

A memoir of the late Dr. H. W. Dudley,

WILLIAM R. WARNER & CO.'S DOSIMETRIC GRANULES.

The Dose is one Granule, and repeated to meet the requirements of the case.

As their name indicates, these Granules are *measured doses* of the alkaloids, metals, and metalloids in such definite and accurate proportions as may best meet the requirements of the physician.

The most perfect system of Dosimetry is that comprised in Parvules originally introduced by Warner & Co. four years ago, but Dosimetric Granules are intended to comprise such remedies as are new and such as are *proximate principles* not so frequently repeated in a measured time for all cases.

These Granules have been divided, according to the metric system, into strengths of half milligramme, one milligramme, and centigramme. In each instance, however, their equivalents are stated in *grains* or fractions thereof. Such a plan, we think, will easily familiarize the practitioner with the metric system for all practical purposes, and will commend itself at once to their recognition.

The selection of the list is based entirely upon the *physiological action* of these active or essential principles, and are therefore administered upon a rational basis, thus making therapeutics stand upon firmer ground than that which it has occupied or even still occupies, when compared with the advances which its sister sciences have taken within the last decade. Under the administration of these Granules, therapeutics partake of the character of a *specific* form of treatment.

The cutting short or strangulation of many acute diseases, while as yet in their incipient or formative stages, has not been sufficiently appreciated. That this is possible, the medical literature of the day affords ample evidence; but to accomplish it, treatment must be both scientific and energetic, *i.e.*, must be based upon the physiological action of drugs, and upon the action of reliable medications.

With such an intention these Granules have been prepared abroad (in France particularly, as suggested by Dr. Burggraeve). This method of treatment has met with success, and it will be a matter of no surprise that therapeutists in this country should be prompt in adopting it.

In the hands of the physician, and *his hands only*, these Granules are potent remedies, capable of accomplishing results far more quickly and certainly than the uncertain fluid extracts and tinctures, and far more pleasantly.

ACONITINE.....1-65 gr. (1 milligram).
Med. prop.—Nerve Sedative.

ACID. ARSENIOSUM.....1-65 gr. (1 milligram).
Med. prop.—Antiperiodic, Alterative.

ANTIMONII ARSENIAS....1-65 gr. (1 milligram).
Med. prop.—Alterative, Diaphoretic.

ARSENII IODIDUM.....1-65 gr. (1 milligram).
Med. prop.—Alterative.

ATROPINÆ SULPHAS....1-130 gr. (½ milligram).
Med. prop.—Anodyne, Antispasmodic.

BRUCINE.....1-130 gr. (½ milligram).
Med. prop.—Tonic.

CALABARIN SULPHAS..1-130 gr. (½ milligram).
Med. prop.—Spinal Sedative.

CALOMEL.....1-65 gr. (1 milligram).
Med. prop.—Alterative, Purgative.

CICUTINE HYDROBROMAS...1-65 gr. (1 mill.).
Med. prop.—Nerve Sedative.

CODEINE.....1-65 gr. (1 milligram).
Med. prop.—Hypnotic, Sedative.

COLCHICIN.....1-130 gr. (½ milligram).
Med. prop.—Sedative, Diuretic, Emetic.

DATURINE.....1-130 gr. (½ milligram).
Med. prop.—Narcotic, Anodyne.

DIASTASE.....1-6 gr. (1 centigram).
Med. prop.—Possesses the power of converting starch into sugar (of the grape).

ELATERINE.....1-65 gr. (1 milligram).
Med. prop.—Purgative.

EMETINE.....1-65 gr. (1 milligram).
Med. prop.—Emetic, Diaphoretic, Expectorant.

ERGOTINE.....1-6 gr. (1 centigram).
Med. prop.—Emmenagogue, Parturient.

FERRI ARSENIAS.....1-65 gr. (1 milligram).
Med. prop.—Tonic, Alterative.

HYDRARGYRI IODID. RUB....1-65 gr. (1 mill.).
Med. prop.—Alterative.

HYDRARGYRI IODID. VIR......1-6 gr. (1 cent.).
Med. prop.—Alterative.

HYOSCYAMINE.....1-130 gr. (½ milligram).
Med. prop.—Hypnotic, Antispasmodic.

KOOSINE.....1-65 gr. (1 milligram).
Med. prop.—Anthelmintic.

MORPHINÆ HYDROBROM.....1-65 gr. (1 mill.).
Med. prop.—Anodyne.

NARCEIN.....1-65 gr. (1 milligram).
Med. prop.—Supposed to influence the inferior part of the spinal marrow, diminishing sensation and mobility in the inferior extremities.

PICROTOXIN.....1-130 gr. (½ milligram).
Med. prop.—Narcotic.

PILOCARPINÆ.....1-65 gr. (1 milligram).
Med. prop.—Sudorific.

POTASSII ARSENIAS.....1-65 gr. (1 milligram).
Med. prop.—Alterative.

QUASSIN.....1-65 gr. (1 milligram).
Med. prop.—Tonic, Febrifuge, Anthelmintic.

WILLIAM R. WARNER & CO.,

PHILADELPHIA. NEW YORK.

FAIRCHILD BROS. & FOSTER,

MAKERS OF THE

PURE DIGESTIVE FERMENTS AND KINDRED PREPARATIONS,

82 and 84 Fulton St., New York.

TRYPSIN.
(FAIRCHILD.)

The Fibrin Digesting Principle of the Pancreatic Juice. Especially prepared as a Solvent for Diphtheritic Membrane.

PEPTOGENIC MILK POWDER.

For the preparation of "Humanised Milk"—an equivalent for Normal Mother's Milk, which accurately supplies every chemical and physiological requirement.

PEPSINE IN SCALES.
(FAIRCHILD.)

One grain guaranteed to digest 1000 grains albumen.

ESSENCE OF PEPSINE.
(FAIRCHILD.)

A solution of the Essential Organic Ingredient of the Gastric Juice, extracted directly from the Peptic Glands of the Stomach.

EXTRACTUM PANCREATIS.
(FAIRCHILD.)

Is a pure, dry product from the pancreatic gland, in the form of a light-yellow powder.

By its use, the preparation of peptonised or artificially-digested food for the sick is rendered entirely practicable and successful.

PEPTONISING TUBES.
(FAIRCHILD.)

For the preparation of Peptonised Milk and other predigested food for the sick.

PEPSINE IN POWDER.
(FAIRCHILD.)

It is prepared from the scales without the admixture of any other substances, and has been offered especially for the convenience of prescribers, to facilitate dispensing in the form of powder, pill, or capsule, etc.

DIASTASIC ESSENCE OF PANCREAS.
(FAIRCHILD.)

The most active, reliable, and agreeable agent for the digestion of Farinaceous Foods.

TABLETS

FOR GASTRIC AND INTESTINAL INDIGESTION.

PANCREATIC TABLETS.
(FAIRCHILD.)

Each Tablet contains three grains of the Pure Extractum Pancreatis.

PEPSINE TABLETS.
(FAIRCHILD.)

Each Tablet contains one grain of our Pure Pepsine in Scales, combined with acids and appropriate aromatics.

PEPSINE AND BISMUTH TABLETS.
(FAIRCHILD.)

Each Tablet contains one grain of Pure Pepsine (Fairchild), and two grains of Bismuth Subnitrate (Squibb).

COMPOUND PANCREATIC TABLETS.
(FAIRCHILD.)

Each Tablet contains:

Extractum Pancreatis	gr. 2
Bismuth Subnitrate (Squibb)	gr. 3
Powdered Ipecac.	gr. 1-10

PEPSINE AND DIASTASE.
(FAIRCHILD.)

In Tablets, each containing two grains.

PEPSINE, BISMUTH, AND PANCREATIC TABLETS.
(FAIRCHILD.)

Each Tablet contains:

Pepsine (Fairchild)	gr. 1½
Ext. Pancreatis (Fairchild)	gr. 1½
Bismuth Subnitrate (Squibb)	gr. 2

PEPTONATE OF IRON.
(FAIRCHILD.)

In Tablets, each containing three grains.

The Peptonate of Iron is considered to be the most readily assimilable of all the forms of iron.

Descriptive Pamphlets of these Preparations to be had gratis upon demand.

by Dr. A. J. C. Skene, was read, in the absence of the author, by Dr. Thallon.

ON THE PROPER SELECTION OF ETHER OR CHLOROFORM AS AN ANÆSTHETIC.

While waiting for Dr. Gerster, the author of the paper, who was unavoidably detained, a letter was read from Dr. Herman Knapp, giving his experience with chloroform and ether:

"From 1860 to 1874 I used chloroform in over three thousand cases. There was no fatal result, but many unpleasant, and a certain number of critical, cases. About once a month I had to resort to artificial respiration and other means of resuscitation. Having seen fatal cases in Berlin and Vienna, I was in constant dread. From 1874 to this date I have used ether in all cases of anæsthesia, in children as well as in adults. No general complaint has been considered a contra-indication. I have administered ether according to the so-called choking plan, yet admitting so much air at the beginning as to let the patient get over the impression of asphyxia. A great many of the operations which I performed could be finished during the period of primary anæsthesia. Others lasted over hours, during which time the narcosis was kept up uninterruptedly. In several hundred cases of consecutive ether-narcosis I have taken notes of the time required to bring about anæsthesia: the average length of time was one minute and thirty-seven seconds. There were no fatal cases, and only a very few in which I had to interrupt temporarily the narcosis; there were none in which it had to be relinquished, as far as I can recollect. The secondary effect was no more unpleasant than from chloroform. I use ether as a universal anæsthetic, considering it safer than chloroform, just as manageable, if not more so."

Dr. A. G. GERSTER, having arrived, proceeded to read his paper. He said both chloroform and ether are dangerous anæsthetics. Chloroform produces very marked depression of the vaso-motor functions. This depression occurs only occasionally in ether-anæsthesia. The practical significance of this fact is that chloroform is the more powerful agent, and its administration requires much greater caution. But this is not sufficient ground for its unqualified condemnation. Consciousness being restored, there is no secondary danger from chloroform. Ether, on the other hand, has not caused as often immediate death on the operating-table, but the dangers from ether do not cease the moment the patient comes from under its influence. Numerous cases of nephritis and pneumonia have followed its use. He would show where chloroform was the more dangerous anæsthetic and should not be used; on the other hand, also where ether was the more dangerous and should not be used. There was too much one-sidedness in favor of ether among physicians of the Eastern cities.

In giving ether, he used Ormsby's inhaler as the best; less ether was required, and consequently it took a shorter time for the patient to regain consciousness. Ether is contra-indicated in renal disease. Its dangers here had been pointed out by Dr. Emmet. That chloroform is much safer in Bright's disease than ether had been abundantly shown. It had been employed for hours in such cases without any tendency to uræmic eclampsia. Fatal cases were cited in which ether had caused death subsequent to its administration by superadding an acute attack to pre-existing nephritis.

Ether was also contra-indicated in bronchitis, and it not unfrequently led to pneumonia in such patients. Three cases were related in which pneumonia followed the use of ether, death resulting. Three other cases had occurred in another hospital during 1886, reported to him by the house-physician. Five cases of serious bronchitis developed after the use of ether in the German Hospital during 1886. After attention had been called to the subject, doubtless other cases would be reported.

In certain classes of cases ether acted badly, as in herniotomy, operations involving the peritoneum, removal of deep-seated tumors in the vicinity of large vessels. Out of one hundred and twenty-five cases in which ether was administered at the German Hospital during 1886, in eleven it acted badly. In such cases chloroform, being substituted, produced complete anæsthesia. Persons addicted to alcohol, perhaps only moderately, were likely to take ether badly.

There was but one contra-indication to the use of chloroform,—namely, a weak heart from any cause whatever. This might occur from fear of the operation or nervous depression. Valvular disease did not necessarily signify a weak heart and contra-indicate the employment of chloroform. Ether was also more dangerous in these cases, but less so than chloroform.

Dr. R. F. WEIR opened the discussion. He said there has been a growing feeling among us that ether is not so safe an anæsthetic as we have for some years believed. Dr. Gerster had cited some of the reasons for this feeling, notably the danger in kidney-disease; "but I think he has stated too positively that where we find albumen, casts, etc., in the urine, ether should not be given. I have frequently given ether in such cases, and latterly, since recognizing the risk, I have administered the anæsthetic much more cautiously, but so far I have not had any reason to complain of the action of the anæsthetic. Dr. Gerster is right in stating that ether is used recklessly to a great extent.

"In certain affections of the larynx ether is contra-indicated; but I would not say that

ether should not be used in kidney-disease: I would say that it should be used cautiously.

"As regards the occurrence of pneumonia, of course ether does bring cold vapor to the lungs. But I noticed that after the introduction of the spray we had pneumonia oftener than formerly. Now we have another cause of pneumonia in our wet carbolized gauze laid so freely upon the patient. The pneumonias which I have seen could be traced to incautious exposure of the patient."

Dr. Weir stated some statistics relative to the number of deaths from ether and chloroform throughout the world, and, referring to the experience at the New York Hospital, he could cite only four deaths occurring during the operation from ether. One other case had occurred at the House of Relief. Although in some cases ether was taken badly, yet at the Hospital they had been able always to continue the operation.

Dr. L. A. SAYRE said he was so thoroughly convinced of the correctness of his own views regarding the relative value of ether and chloroform that he had continued the use of chloroform notwithstanding the general opposition manifested towards it. He prefers chloroform to ether because it does not produce spasmodic muscular contraction; it is more agreeable to the patient; it is more speedy in its effect; it is not followed by bad after-effects, such as vomiting, Bright's disease, pneumonia, etc. The use of chloroform or ether without measure, freely mixing them with the air, which was their antidote, was wrong. Chloroform and ether are both powerful agents; each has caused many deaths. Therefore they should be used with the same care and skill in measuring the dose and guarding against accidents as in the employment of any other potent drug.

Dr. Sayre showed the inhaler which he had used for years, by which the amount of chloroform could be measured perfectly, and the air to any degree excluded. Administered in this way, twenty or thirty drops of chloroform would almost invariably produce anæsthesia by a few inhalations; and if from any cause the heart should cease to act, it could be restored by a few efforts at artificial respiration. If, however, the chloroform were given mixed freely with air, as was so commonly done, a larger quantity would be required, and restoration of the heart's action would be impossible.

Dr. W. GILL WYLIE said that during the last two months he had lost two patients from the influence of ether, whereas prior to that he could not recall a single instance. He thought Dr. Gerster spoke truly when he said that ether was administered recklessly in New York. One of his patients died of Bright's disease following the use of the ether, while the second died within an hour after finishing a herniotomy, probably from suffocation. She weighed as much as two hundred and fifty pounds. Very fat patients were more likely to die of suffocation during the use of the anæsthetic. He recalled a third case of death from ether during the operation, occurring within a block of where his own patient died. He would, as a rule, give ether in preference to chloroform, especially in general surgical operations; but in the lying-in room and in children he would give chloroform. But there were also cases where the kidneys or lungs were diseased in which chloroform should be employed.

Dr. W. A. WYETH would use chloroform when patients were under six years of age. Experience seemed to show that it was perfectly safe and to be preferred to ether in childbirth. A third indication for chloroform was the fact that the patient had previously taken ether badly. It might also be used when ether could not be obtained. He would use ether although there was nephritis, but cautiously, and if dangerous symptoms arose he would substitute chloroform. He had never seen, as far as he could remember, any accident from ether; certainly no death. He had not met with the class of cases referred to by Dr. Gerster, in which the patient could not be anæsthetized by ether.

Dr. ABBE had seen only one death from ether: it occurred in the practice of the late Dr. Little, the operation being for tetanus. So far as pneumonia and nephritis following ether-administration were concerned, both were under our control. He thought pneumonia was more likely to be due to draughts and other exposure after or during the operation. Four cases of acute nephritis after the use of ether had come under his observation during the past year.

Dr. P. F. MUNDÉ had formerly used chloroform a great deal, and, while he had seen no deaths from it, he had seen patients restored with difficulty, and he was in great fear of it. He had during later years employed ether almost exclusively. But both were powerful drugs, and he felt more anxiety with regard to the anæsthetic than with regard to the operation. Ether, however, was the safer. He preferred Clover's inhaler. In some cases he had failed to get the patient satisfactorily under the ether, and had substituted chloroform, rendering the patient completely anæsthetic. In short operations he preferred chloroform. In obstetrics he preferred chloroform. In long operations he preferred ether, given by Clover's inhaler.

Dr. R. W. AMIDON, referring to the collection of mucus in the bronchi during ether-administration, recommended as a preventive the use of atropine or a preparation of belladonna prior to the administration of the ether.

Dr. THALLON thought kidney-disease should not contra-indicate the use of ether, but it should make us cautious. The best inhaler was that employed by dentists in giving nitrous oxide.

Dr. GERSTER closed the discussion. Speaking of the cause of pneumonia, he was of the opinion that the secretions of the mucous membranes were changed by the ether in inhalation, and these, entering the air-passages, set up inflammation. Statistics, as they had been collected, were worth nothing in deciding whether ether or chloroform was the safer anæsthetic. He knew of five deaths from ether in one hospital which had never been reported. Again, how often had ether caused death from nephritis or pneumonia hours or days after the operation, the cause of the pneumonia or kidney-disease never being recorded!

REVIEWS AND BOOK NOTICES.

THE PRACTITIONER'S HAND-BOOK OF TREATMENT; OR, THE PRINCIPLES OF THERAPEUTICS. By J. MILNER FOTHERGILL, M.D. Third American from the Third English Edition. Lea Brothers & Co., Philadelphia, 1887. Pp. 660.

The lessons in rational medicine which Dr. Fothergill essayed to teach in this work have not fallen upon unappreciative ears, and the favor accorded to former editions has led to increase in size by the addition of important chapters on "The Dietary in Acute Disease and Malassimilation," and on "The Management of Convalescence."

This work on the principles of therapeutics has been previously favorably noticed in these pages, and we can only repeat our former expression of commendation, and again urge it upon the attention of our readers.

HYSTÉRIE ET TRAUMATISME: PARALYSIES, CONTRACTURES, ARTHROLOGIES, HYSTÉRO-TRAUMATIQUES. Par le Dr. PAUL BERBEZ. Paris, 1887.

This is an interesting monograph of some one hundred and twenty-five pages, discussing the history, etiology, symptoms, diagnosis, pathogeny, prognosis, and treatment, as well as full clinical reports of twenty-six cases, of hysteria following injury of a more or less simple character. The author's style is clear, concise, and readable. His assertions are based upon the study of a hundred cases, selected, with the assistance of Professor Charcot, from the wards of La Salpêtrière. In his own words, he proposes to consider "hysteria from the surgical stand point." He maintains that the various paralyses, contractures, anæsthesias, pains in the joints, etc., which frequently follow injuries of a slight character, such as luxations, contusions, and bruises, are chiefly hysterical, and must be treated accordingly.

The chapter upon the pathogeny of the disease, though of a nature highly theoretical, bespeaks an originality and force of reasoning which will always awaken interest and command respect. We could have wished that the chapter upon the diagnosis had been made somewhat more exhaustive, since that is the feature of the disease about which we need at present the most information. In his treatment the author presents nothing new, but he insists forcibly upon the moral and physical care of the case.

Although the reader may differ from some of the conclusions, he must nevertheless admit their practical bearing for surgeons, while their theoretical considerations for psychologists possess interest and value, and mark this as a valuable contribution to the study of this confessedly obscure subject. L. H. M.

THE PHYSICIAN'S DOSE AND SYMPTOM BOOK: Containing the Doses and Uses of all the Principal Articles of the Materia Medica and Officinal Preparations in Alphabetical Order. By JOSEPH H. WYTHE, M.D. Seventeenth Edition. Completely rewritten and enlarged. P. Blakiston, Son & Co., Philadelphia, 1887. 12mo, pp. 226.

This convenient little volume is very useful for reference as to doses of the various preparations of drugs and their uses. It also contains valuable lists of incompatibles, of antidotes to poisons, and of symptoms and treatment of the principal diseases.

MISCELLANY.

JUDGE C. C. FULLER, of Michigan, decided, when a physician refused to testify on the ground that the evidence would be expert testimony, "After many years' study and observation, I decide that a physician's knowledge is his stock in trade, his capital, and we have no more right to take it without extra compensation than we have to take provisions from a grocery, without pay, to feed the jury. The court rules that the witness is not *compelled* to testify."

THE next meeting of the Medical Editors' Association will be held in Chicago on Monday evening preceding the meeting of the American Medical Association. The President, Dr. Shoemaker, will deliver an address: "Some of the Present Abuses of Medical Literature." It is desirable that all medical editors who can shall attend, as the organization is a permanent one and largely social. Dr. T. L. Gray, of Chicago, is Chairman of the Committee of Arrangements.

Members of the press who expect to be present should send their names as early as possible to the Secretary, Dr. William Porter, 3137 Lucas Avenue, St. Louis. Exchanges please copy.

NOTES AND QUERIES.

OBITUARY.

ELLIOTT RICHARDSON, M D., Lecturer on Operative Obstetrics in the University of Pennsylvania, Obstetrician to the Philadelphia Hospital, and Gynæcologist to the Pennsylvania Hospital, died on the 9th instant of typhoid fever.

Dr. Richardson came of an old Quaker family, and was educated at the Friends' School in this city, afterwards graduating from the Medical Department of the University of Pennsylvania in 1867. As a student he was faithful and conscientious, and as resident physician in Wills, the Philadelphia, and the Pennsylvania Hospitals gained the regard and respect of his contemporaries and of the older men under whom he served, many of whom were his friends in after-life.

Commencing practice in 1870, he soon began to devote himself especially to the study of obstetrics and gynæcology, and spent years of laborious practice among the poor and in dispensaries until he obtained a thorough knowledge of these subjects. He located at first in Spruce Street, near Seventh, but within the last ten years moved westward to the more fashionable part of the city, where he was rapidly building up a large practice among the best class of his fellow-townsmen, when death overtook him and cut short his career just as he was beginning to reap the fruits of nearly twenty years' study and unrequited labor.

Dr. Richardson was naturally of a retiring disposition, and was intimately known to but few, although his occupation brought him outwardly before many. He was above all things a practitioner. He showed at his best beside the bedside of the sick and in the lying-in chamber. His readiness for every call of charity or suffering, his tender sympathy for pain and distress, no less than his mastery of every diagnostic and therapeutic means, marked the ideal minister to the sick, while his punctilious sense of honor and of professional courtesy was such as commanded the respect even of those whose own course was actuated by a less lofty ideal.

As a teacher of obstetrics and gynæcology Dr. Richardson was lucid and satisfactory in explanation and skilful in demonstration, while as a general lecturer on didactic subjects he was less impressive. His chief success, in his own estimation, was in the case of the well-known Porro-Müller operation which he performed a few years ago, and which was and we believe remains the only successful operation of the kind as yet performed in this country.

Personally, Dr. Richardson was to his intimate friends a charming companion. An unbroken friendship of twenty-one years enables the writer to speak on this point with knowledge. His acquaintance with the best classical English literature was extensive, and was used to enliven his conversation in a way that only his chosen friends had the opportunity to enjoy.

A man of high moral character and deep religious feeling, he rarely expressed himself freely, but in every action of his life the moving springs of his conduct could be seen. Few men of his age could less easily be spared from the ranks of the medical profession in this city, for few so well upheld the ethical and professional standard which in this mercenary age is with so much difficulty maintained. A. V. H.

A PRIZE ESSAY ON HAY-FEVER.

At its last meeting, September, 1886, at Bethlehem, New Hampshire, the United States Hay-Fever Association decided to offer a prize for the best essay from a competent source, preferably a physician, on some question relating to *Catarrhus æstivus*, or hay-fever.

In order to carry out the above, the following is announced officially:

1. Subject of the Essay, Hay-Fever. (*a*) Its Pathology. (*b*) The predisposing and the aggravating causes. (*c*) Advice to the sufferer.

2. The essay not to exceed *four thousand words*, and to be as practical and non-technical as possible.

3. The manuscripts to be received at the office of Samuel Lockwood, Freehold, New Jersey, not later than April 30, 1887.

4. Each manuscript to have a motto under the title, and to be accompanied with a sealed letter containing said motto, also the name and address of the author. These letters not to be opened until after the award is decided.

5. The prize to be $25. The accepted essay to be published immediately in the Association's annual report, one hundred copies to be given the author.

6. The Committee of Award: Samuel Lockwood, Chairman of Committee on Scientific Facts; Frank B. Fay, President U. S. H. F. A.; Charles C. Dawson, Secretary U. S. H. F. A.

SAMUEL LOCKWOOD,
Chairman of Committee on Scientific Facts.

FREEHOLD, N.J., January 15, 1887.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM APRIL 24, 1887, TO MAY 7, 1887.

MAJOR BLENCOWE E. FRYER, SURGEON.—Ordered for examination by Army Retiring Board at San Francisco, California. S. O. 101, A. G. O., May 2, 1887.

MAJOR GEORGE M. STERNBERG, SURGEON.—Assigned by the President to the special duty, under the Treasury Department, of "investigating the merits of the method practised in Mexico and Brazil for preventing yellow fever by inoculation." Relieved from duty as attending surgeon and examiner of recruits in Baltimore, Maryland. S. O. 101, A. G. O., May 2, 1887.

MAJOR JOHN S. BILLINGS, SURGEON.—Granted leave of absence for ten days, to take effect May 3, 1887. S. O. 98, A. G. O., April 28, 1887.

MAJOR J. V. MIDDLETON, SURGEON; MAJOR J. C. G. HAPPENSETT, SURGEON; CAPTAIN F. C. AINSWORTH, ASSISTANT-SURGEON.—Appointed to assemble at the United States Military Academy, West Point, New York, on June 1, to examine into the physical qualifications of the members of the graduating class and of the candidates for admission to the Academy. S. O. 102, A. G. O., May 3, 1887.

CAPTAIN LEONARD Y. LORING, ASSISTANT-SURGEON.—Sick-leave of absence still further extended six months on surgeon's certificate of disability. S. O. 103, A. G. O., May 4, 1887.

CAPTAIN VICTOR BIART, ASSISTANT-SURGEON.—Sick-leave still further extended one year on surgeon's certificate of disability. S. O. 99, A. G. O., April 29, 1887.

FIRST-LIEUTENANT CHARLES B. EWING, ASSISTANT-SURGEON.—Ordered from Fort Leavenworth, Kansas, to Fort Lewis, Colorado, for temporary duty. S. O. 100, A. G. O., April 30, 1887.

FIRST-LIEUTENANT CHARLES E. WOODRUFF, ASSISTANT-SURGEON (recently appointed).—Ordered for duty at Fort Wayne, Michigan. S. O. 96, A. G. O., April 26, 1887.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U.S. NAVY FOR THE TWO WEEKS ENDING MAY 7, 1887.

ASSISTANT-SURGEON L. W. ATLEE.—Ordered to the Receiving-Ship "Vermont."

PASSED ASSISTANT-SURGEON CLEMENT BIDDLE.—Detached from the Naval Academy and to Marine Rendezvous, Philadelphia, Pennsylvania.

PASSED ASSISTANT-SURGEON RICHARD ASHBRIDGE.—Ordered to the Naval Academy.

MEDICAL INSPECTOR A. HUDSON.—Ordered to the U.S.S. "Trenton."

PASSED ASSISTANT-SURGEON C. T. HIBBETT.—Ordered to the U.S.S. "Trenton."

ASSISTANT-SURGEON CORBIN J. DECKER.—Detached from the Receiving-Ship "St. Louis" and to the U.S.S. "Trenton."

ASSISTANT-SURGEON JOSEPH SHAFER.—Detached from the "Minnesota" and to the "Ossipee."

SURGEON W. J. SIMON.—Ordered to the U.S. Steamer "Boston."

ASSISTANT-SURGEON C. P. HENRY.—Detached from hospital, Philadelphia, and to the "Boston."

ASSISTANT-SURGEON VICTOR C. B. MEANS.—Detached from hospital, Mare Island, and to the hospital, New York.

PASSED ASSISTANT-SURGEON MANLY H. SIMONS.—Detached from Naval Academy and to the "Constellation."

PASSED ASSISTANT-SURGEON OLIVER DIEHL.—Detached from hospital, New York, and to the hospital at Philadelphia.